



SEQUENCE LISTING

RECEIVED

MAY 22 2002

TECH CENTER 1600/2900

<110> MERKULOV et al.

<120> ISOLATED HUMAN TRANSPORTER PROTEINS,
NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
AND USES THEREOF

<130> CL001103

<140> 09/777,921

<141> 2001-02-07

<160> 126

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 2673

<212> DNA

<213> Homo sapiens

<400> 1

```
ccgcaacccc gacggcgccc caaacgctgt tgcgcgcgcg cccccgccc gcccggcctc 60
gcgctgggtc cggctctgcc ccgcagccct cgatctcccg tgacttcctc ggccaggccg 120
cctgcgcctc tgggaccatg ttgcgctggc tgcgggaact cgcgctgcc acccgggcct 180
gccaggacgc ggagcagccg acgcgctacg agaccctctt ccaggcactg gaccgcaatg 240
gggacggagt ggtggacatc ggcgagctgc aggaggggct caggaacctg ggcacccctc 300
tgggccagga cgccgaggag aaaattttta ctactggaga tgtcaacaaa gatgggaagc 360
tggattttga agaatttatg aagtacctta aagaccatga gaagaaaatg aaattggcat 420
ttaagagttt agacaaaaat aatgatggaa aaattgaggc ttcagaaatt gtccagtctc 480
tccagacact gggctctgact atttctgaac aacaagcaga gttgattctt caaagcattg 540
atggtgatgg gacaatgaca gtggactgga atgaatggag agactacttc ttatttaatc 600
ctgttacaga cattgaggaa attatccgtt tctggaaaca ttctacagga attgacatag 660
gggatagctt aactattcca gatgaattca cggaagacga aaaaaaatcc ggacaatggg 720
ggaggcagct tttggcagga ggcattgctg gtgctgtctc tcgaacaagc actgcccctt 780
tggaccgtct gaaaatcatg atgcaggttc acggttcaaa atcagacaaa atgaacatat 840
ttggtggctt tcgacagatg gtaaaagaag gaggtatccg ctgcctttgg aggggaaatg 900
gtacaaacgt catcaaaatt gctcctgaga cagctgttaa attctgggca tatgaacagt 960
acaagaagtt acttactgaa gaaggacaaa aaataggaac atttgagaga tttatttctg 1020
gttccatggc tggagcaact gcacagactt ttatatatcc aatggagggt atgaaaacca 1080
ggctggctgt aggcaaaact gggcagtaact ctggaatata tgattgtgcc aagaagattt 1140
tgaaacatga aggcctggga gctttttaca aaggctatgt tcccaattta ttaggtatca 1200
taccttatgc aggcatagat cttgctgtgt atgagctctt gaagtcctat tggctggata 1260
attttgcaaa agattctgta aaccctggag tcatgggtgt gctgggatgc ggtgccttat 1320
ccagcacctg tggtcagctg gccagctacc cattggcttt ggtgagaact cgcagcagg 1380
ctcaagccat gttagaaggt tccccacagc tgaatatggt tggcctcttt cgacgaatta 1440
tttccaaaga aggaatacca ggactttaca gaggcacac cccaaacttc atgaagggtc 1500
tccctgctgt aggcatacgt tatgtggttt atgaaaatat gaagcaaact ttaggagtaa 1560
cccagaaatg atgttgcat ttttgcctta gcctgataat tgaaactttc aacaatctct 1620
ggagtgaact tttctcctcg aattgaaaca agtctatggc aaaagaagct gcattttttt 1680
cacaaaaggg aagacggtaa caatggtcac ttcaaacttt tgggctaaat tatatgtaca 1740
cagaaatggt caaaatcata gttttaatgt gttttgaaaa ggccacacaa ttatacttta 1800
tcttttctta ataactctgc aaatctctgc cctgaatccg aaatctgaaa atgtactggc 1860
ttgaacaaaa tttgttttgt gtgttagagt tataaatcat taatctttat ttcgggtggg 1920
```

```

ttacgtttat gccagttcct ttatatTTaa atttcttggt ttatatattt tgaatgtctt 1980
tatagatttc tttaaatttc cttatagaac cattaataga aaatcattac atttaaaata 2040
taccttacag caaaagcatc caaataagta tagggtttat gtccttattt ttctttcagc 2100
tgaatacgaa tgaacacagt ggtggaattt ctgaaggga gtgatgaaat tatattttatt 2160
tcagtgggca cttttccatt ttaccactgt accattattt ggttcctgga gttatacact 2220
aattttcagt atattactgt taaattacca acacaaggca atttatttga aagattccgt 2280
ttatcctgcc attgctttga aaagcagcag gaaacgaaat tttttgactt gtatcagctt 2340
ctgcagagca tctttgtttt cctttgtcct ttgtttccta ccttttgaat cagattccgt 2400
tttagtcagg aagacttctt gggaccattc ttagtaacct gaaatttctt ttttaattgc 2460
atgaagtgga ttgatcatga gcaagtgatg ggctttattt ctccctcact ggtgaatatc 2520
ctttgaactt gctgtttgca atatgggcag ccacaaaagg ggagagatgc ctattaaatc 2580
ggcgggggtgt atgacttctg aaaacattgg ataccctatt ttgaaaaggg aaaggcccaa 2640
tttggggaaa catataccaa tgcattgatt ctg 2673

```

<210> 2

<211> 477

<212> PRT

<213> Homo sapiens

<400> 2

```

Met Leu Arg Trp Leu Arg Asp Phe Ala Leu Pro Thr Ala Ala Cys Gln
 1          5          10          15
Asp Ala Glu Gln Pro Thr Arg Tyr Glu Thr Leu Phe Gln Ala Leu Asp
          20          25          30
Arg Asn Gly Asp Gly Val Val Asp Ile Gly Glu Leu Gln Glu Gly Leu
          35          40          45
Arg Asn Leu Gly Ile Pro Leu Gly Gln Asp Ala Glu Glu Lys Ile Phe
          50          55          60
Thr Thr Gly Asp Val Asn Lys Asp Gly Lys Leu Asp Phe Glu Glu Phe
65          70          75          80
Met Lys Tyr Leu Lys Asp His Glu Lys Lys Met Lys Leu Ala Phe Lys
          85          90          95
Ser Leu Asp Lys Asn Asn Asp Gly Lys Ile Glu Ala Ser Glu Ile Val
          100          105          110
Gln Ser Leu Gln Thr Leu Gly Leu Thr Ile Ser Glu Gln Gln Ala Glu
          115          120          125
Leu Ile Leu Gln Ser Ile Asp Val Asp Gly Thr Met Thr Val Asp Trp
          130          135          140
Asn Glu Trp Arg Asp Tyr Phe Leu Phe Asn Pro Val Thr Asp Ile Glu
145          150          155          160
Glu Ile Ile Arg Phe Trp Lys His Ser Thr Gly Ile Asp Ile Gly Asp
          165          170          175
Ser Leu Thr Ile Pro Asp Glu Phe Thr Glu Asp Glu Lys Lys Ser Gly
          180          185          190
Gln Trp Trp Arg Gln Leu Leu Ala Gly Gly Ile Ala Gly Ala Val Ser
          195          200          205
Arg Thr Ser Thr Ala Pro Leu Asp Arg Leu Lys Ile Met Met Gln Val
          210          215          220
His Gly Ser Lys Ser Asp Lys Met Asn Ile Phe Gly Gly Phe Arg Gln
225          230          235          240
Met Val Lys Glu Gly Gly Ile Arg Ser Leu Trp Arg Gly Asn Gly Thr
          245          250          255
Asn Val Ile Lys Ile Ala Pro Glu Thr Ala Val Lys Phe Trp Ala Tyr
          260          265          270
Glu Gln Tyr Lys Lys Leu Leu Thr Glu Glu Gly Gln Lys Ile Gly Thr
          275          280          285

```

Phe Glu Arg Phe Ile Ser Gly Ser Met Ala Gly Ala Thr Ala Gln Thr
 290 295 300
 Phe Ile Tyr Pro Met Glu Val Met Lys Thr Arg Leu Ala Val Gly Lys
 305 310 315 320
 Thr Gly Gln Tyr Ser Gly Ile Tyr Asp Cys Ala Lys Lys Ile Leu Lys
 325 330 335
 His Glu Gly Leu Gly Ala Phe Tyr Lys Gly Tyr Val Pro Asn Leu Leu
 340 345 350
 Gly Ile Ile Pro Tyr Ala Gly Ile Asp Leu Ala Val Tyr Glu Leu Leu
 355 360 365
 Lys Ser Tyr Trp Leu Asp Asn Phe Ala Lys Asp Ser Val Asn Pro Gly
 370 375 380
 Val Met Val Leu Leu Gly Cys Gly Ala Leu Ser Ser Thr Cys Gly Gln
 385 390 395 400
 Leu Ala Ser Tyr Pro Leu Ala Leu Val Arg Thr Arg Met Gln Ala Gln
 405 410 415
 Ala Met Leu Glu Gly Ser Pro Gln Leu Asn Met Val Gly Leu Phe Arg
 420 425 430
 Arg Ile Ile Ser Lys Glu Gly Ile Pro Gly Leu Tyr Arg Gly Ile Thr
 435 440 445
 Pro Asn Phe Met Lys Val Leu Pro Ala Val Gly Ile Ser Tyr Val Val
 450 455 460
 Tyr Glu Asn Met Lys Gln Thr Leu Gly Val Thr Gln Lys
 465 470 475

<210> 3

<211> 69327

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(69327)

<223> n = A,T,C or G

<400> 3

aacccatggt agtgtgcagt tctgctggca cacacatgca gttgtgtaac cactaccacc 60
 aaaagcaaga tgtaaaatag ctccatcacc cccacaagcc ttctgatgct cttttgtcat 120
 caattccctt cccgctagtc acaactggta actactgatt tgttttctgt ccctatagtt 180
 ttgccttttc cagaatgtca ttgttgacag gtatcagtaa ttcattcctt tttattgcta 240
 attactatct cactgtatga atgcaacaca gggtgtttac cagttcaccc gttaaagaac 300
 attttgtttc tgcgcttgac agttatgaat agaactgcta taaaccctca agtaaaaagt 360
 ttggtgtgaa gataattttc tcagcaaaaa cgctgacagg taatttttct aagtattact 420
 tttttaaaaa agtaaaatag cctgtagccc cagctactca ggaggctgag gcaggagaat 480
 agcttgaacc caggaggcgg aggttgcagt gagttgagat tgtgccactg cattccagcc 540
 tgggcgacag agctagactg tctcaaagaa aaaaaaaaaa aataacaaat aaataaaaaag 600
 taaaatgaaa gcatgtaagt gtaagatgac tagttcaagc aacctctctt caagtacaga 660
 gtattcagag tagagattaa aagagggttt caaggacaga gaaaatttga agtttgaagg 720
 cagttccaaa ggaaggcaat gattcttaat aagactggaa gttggaagta atataaaaaag 780
 ataaatcagt ttcaagatga ttttactaag caggcagccc ttaatttaca aattctagat 840
 tcatacatat cttaaacata caaaatgata tgaggagagg taagttcagg gtctgagttc 900
 ctggctgttg ttggaactga tttctgtgta gtgattcaga agatgtgaga caccctaatt 960
 tacaagtaca gaggtatctt cttttctgca aacagcagta caacaatagt tcctcttacg 1020
 cagctgtgaa tgaacaggat tattacaatt aatgatattc catttgattg gcgccttaga 1080
 gaattaagac ctttcacacc taatatacaa ctttggtgtg aaggcagata tttatatattc 1140

cattttactg	atgagagact	acccggagac	gctatgtcac	acctgaagga	ttaggtactt	1200
tctctgttaa	gtccaatggt	ccttccgtta	ttccatgcta	ggcagtaata	agttctgtct	1260
tgcttgagta	ataagctcca	aacctcgga	ctgcacccat	cttgagaagg	aggagggcgc	1320
tgtgggtttt	tctgataagt	gcagctggca	gacactctat	acgcttaatc	acggggcaaat	1380
cctacctaag	ctgcctacca	aactagtcct	tcttttcccc	gttgcccacg	cagatggctg	1440
ttgatctttt	ctgcaacaaa	tccaggagtt	tctccttttt	gttttataat	tgctccaata	1500
gatgcttttag	gatttaactc	tctgcttttt	aaagcagaat	cgccatccca	ggtgtgcaac	1560
cacgaaaaaa	ttagacatcc	gtgagagaca	atgccctcca	tggcccagtt	tccaggcaga	1620
gagaagcagc	tctgggctga	ccgccaaggc	tccggcccga	gagggctctt	aagtggagta	1680
accagtcttc	aagaccccgc	tcccaagcca	ccgacgcgct	gacgctgcag	ccctggacct	1740
gctggggggc	tcttctctcg	acccgcctgc	tgacagcggg	actggcaact	gggcagaggt	1800
cgaccccggg	tccgcacagc	acctcccagc	acccagctcc	cagctccctc	acttccggct	1860
ctctggagga	gggcccggcc	agtgcgcg	aggcagcgc	ggcgagctcc	tccccagcag	1920
cggcggggacg	gccacaccct	gcgcgcgcg	cgggctcggg	tggggctctcc	gctcctgcgc	1980
cctgcgcgcc	gcagccgcac	ccccgacggc	gccccaaacg	ctggtgcgcc	gcgcgccccg	2040
cccagcccg	cctcgcgctg	gtcccggctc	cgccccgcag	ccctcgatct	cccgtgactt	2100
cctcgccag	gcccctgcg	cctctgggac	catggtgcgc	tggctgcggg	acttcgtgct	2160
gcccaccgcg	gcctgccagg	acgcggagca	gccgacgcgc	tacgagaccc	tcttccaggc	2220
actggaccgc	aatggggacg	gagtgggtga	catcggcgag	ctgcaggagg	ggctcaggaa	2280
cctgggcatc	cctctggggc	aggacgcgca	ggaggtgggt	cgccgcgggg	gcgccgcctg	2340
agcgtaggga	gggctgcggg	cgctggggac	actgcgagga	ccgaggaggg	cggcggcctg	2400
aggcgttgcc	aggagaggaa	ggaggaactg	tggcgcccag	cgctccggtg	gcttcagaaa	2460
ctcgggcgtg	gggcccgcgac	cggcgaccccc	ggtaacagaa	gtgggtcata	atacgaaaagt	2520
ctactggtat	ttgtccagat	aaaatgagtg	ttgtggacac	tctggccccac	gggcactggt	2580
aaatttttaa	gacacttttg	tccatgaatcc	atcccagggt	ctttgttttc	tgttttaata	2640
ccttgacagac	atgtaatccg	tttttagctgt	cagacttcag	tgggtcccaa	gttttgtata	2700
aaggcgcaca	cattcgatct	ccttcgaagc	tgctttgtta	cagcagctat	gtgtattgtc	2760
tactgtttga	aaactgtttg	aaaaccaatc	gcgtgtttcc	cccacttcct	gttgagaagg	2820
aatggcggca	ttccattggt	taagacattc	ctaggttaat	gccctaggta	cataaattga	2880
tctgaagggt	ttgactgacc	tgcgactgag	caatttcatt	ttctctgagt	catcttaact	2940
gtgcccctga	acttctgccc	ccttagtagg	gtggagatat	gtggaacttc	tccaaccctg	3000
ttgaagcggt	ccctgacact	ggcattctct	tatccaaaga	gggaaagtga	ttaggttact	3060
atgagggccca	acaactgtta	tatagttata	tttcacttct	cttttaattgt	ctttggtagt	3120
tataggcctc	ttcagtttac	tgtttcttct	agagtcagat	ttagtaagtt	acaatttttt	3180
ttgaaactgc	ctgttctgtc	caaggttcat	aatactcacc	gatgatttta	taacacttct	3240
gactgaatct	gtaggtagggt	tctctatttc	attcctcata	tctatccttt	tctccccttc	3300
aatcttgcca	aagttttgtg	tattttattc	atactttgaa	ggaaccaact	tttgggtactt	3360
tgtgctgatt	gtcccagaaa	tggcccagtt	ggagttcccc	accatgtcca	atcattggct	3420
ggaagcagcc	caggaaaggg	acgaccttgc	tgcagtgcat	cagcagatgc	cagggtaga	3480
ggctagagag	tggaagtcaa	ctgtgttcct	cacagtaggt	gcctttgaag	ggagatctca	3540
gtggtacaac	tccatggtcc	ctacaatata	caaaagctct	ttggagtgtc	caatgatttt	3600
taagattgta	aagggatcct	gagatcaaaa	agcttgagaa	ttgctgctgt	atcaccattt	3660
ttacgtaact	gcacatattt	ctgttatatg	tttgtgtcat	agtatatgtt	accaattctt	3720
tttaaatcac	cttttacttt	attgatagtt	taaaaacgat	tgtaagtga	attgcaatgg	3780
atgtcctttg	tattcatttt	ctcattctgg	tccagttact	ttcgtaggat	aaatttttag	3840
gagtggacat	tgctgagtct	gaaggtaaca	cacattttta	actgggatac	gtattgcctt	3900
tcggaaacct	tagaccattt	ttcactcttt	tgactgacag	tgcttgcttc	tccacatcct	3960
cgctcattca	gggtatcagt	ccttgtaaag	tctctatttc	tgcaggtgaa	attccttttc	4020
atttctctgtc	ttagtccatt	tagtggtgct	atagtggaat	atctgagaca	gggtaattta	4080
taaagaaaag	acattttattt	agctcacagt	tccgcaggct	gggaagttta	agaagcggtg	4140
tgctggcatc	tgctggactc	ctggggaggg	ctttcctgct	gtgtcacaa	atgggtggaaa	4200
gtcaaagtgg	aagtggacat	gtgtgaagaa	gcaaaatccg	aggggtgtcc	tggctttata	4260
gcaaccagc	ctcgagggaa	ctgatccatt	actgagggaa	ctaattcagt	ctcatgagag	4320
agagaactca	ctcactactg	caagaatgac	accaagccat	tcatgaggga	tctgcctccg	4380
taaccttgac	acctcctgct	aggctccctcc	tcccaacacg	gccacatcag	ggatcagact	4440
tcaacatgag	tttttgtggg	gacaaacaaa	acgtagcact	tgctttgcct	tttggttcta	4500

ttcacatcct	ccacaggatt	gcattatgcc	tacccatttg	gtgagggcag	tcttctttaa	4560
ttggtttact	gattcaaagt	ctaccctcct	ccagagacat	cctcacagac	acacccagaa	4620
atcatgtttt	accagttatc	tgggcatccc	ttagtccaga	cgagttgata	cataaaatta	4680
accatcacac	atgggataga	attaggatta	cacagtcaac	ctttatggga	gaaaatttca	4740
gaggcatgtc	aggggtttat	gtaatgtcaa	ggagtgaaga	cattggctac	ttgagcatag	4800
aaatgagaac	tgtggggtga	ctcttcggtg	gaaagtttca	aggtagtagt	ttgtatctaa	4860
gccaaatact	cagcttgaag	caaaatctct	ataaattttc	atctgatttg	atctcatctc	4920
cgtgtttcca	agcatttgta	atgaattgag	catttagaag	agaacaaatt	tctgtttaag	4980
tttctttaga	ttttagatgg	aaagaatgta	gaaataagag	tagaatgtag	aaatagggtat	5040
aaagaatata	atagctaacc	attactaagt	gttccagaat	tatccaggga	agagaaaaga	5100
attcaaggca	agtccctgaga	caaaattaag	aaccaatttg	aagtgaagc	gctacatttt	5160
ttttttctgg	tatgaccttt	cttttctata	tgttccaaat	ctcctcacta	tgaaattagt	5220
gaaaaattaa	agttaaaaat	tagagaaaat	tcacattaag	ttctcctagg	actcagtagt	5280
ataaggggtat	agactgagag	tagaatgtag	tgtgagaaca	aggagataca	gtattttaacc	5340
attactaatt	ctcttatact	tgtctagtaa	tcctattttc	ttttaaaagt	cttcagttat	5400
tttctcttta	cgcacctcct	tctccctctt	gtcttctctc	ttctaccccc	atctttcttc	5460
ctgtggagcc	ttcatgaatg	ggattagtg	ttgtataaaa	gtgacctgga	agaccttcct	5520
tgccccctcc	accatgtgag	gacacagtga	gaaaacagt	gtccatggaa	ccggaaaagt	5580
ggtcctcact	agacagtaaa	tctcctagca	cttcgatcta	ggacttccag	tgtctggaac	5640
tgcaagaaat	caatgcttat	tgtttaagta	agccagtagt	atttttgtca	tagcagccca	5700
gttggactag	gacaattacc	aagagcaaga	aggggaagcag	caagctacaa	gagagttccg	5760
tccttggtgt	aaattgaccg	tgtaatcctt	gtcaagtttg	agccttactg	gagctttact	5820
ttcttattct	taaaatgcag	atatcttgcc	tgcacctcgg	acagagcttt	taacaagggtc	5880
atatgttgca	gaatatgaaa	gttcatgtta	aaaaaccctt	taaaatgtgg	tatcccattt	5940
actagctggg	gaacttcttg	aggaacctct	gtgcccattg	gtatgaagt	tatgctgaat	6000
gatcacccaa	tgtagagga	gtgggtggac	tggtaacctg	atttaagggc	cattctaaact	6060
cttacattct	atgatttttt	taattctgtc	tttaagtttt	tacatttaca	atcacagaaa	6120
aaatagtcac	atagaagaat	agtagcttag	caaatgttta	ttgcattgag	tggaatcagg	6180
atttcactcc	attaagtaat	tcctctgtta	acaaagaggg	ttcatttcat	ttttatttca	6240
ttaatatgtc	tttttttttt	ttttttctgg	agacagaatc	ttgctctatc	accaaggctg	6300
gagtgcagt	gtgcatctc	ggctcactgc	agcctctgct	tcctggattc	aagcgattct	6360
tgtgcctcag	cctcccaagc	agctgagatt	acaggcacat	gccaccacac	ctgggttaact	6420
tttgattttt	ctagtagaga	tgggattttg	ccatgttggt	caggctgggtc	ttgaattcct	6480
ggcctctagt	gatctgcctg	cctctgcctc	tgaaagtgt	aagattacag	gcatgagcta	6540
ccatggccag	cccatttcct	taatatttta	attgtcagac	atgttatggt	ttctggcaca	6600
atattaagaa	gacatgat	gaaatcacag	ggtgaatttt	agggcatcac	aacagaaaaga	6660
ttatggtata	agaaaaacaa	tgggaattcca	actacatttc	tgtcaaatgt	tctaaaaatat	6720
ataaaatctg	tatcttttgt	gttctctcct	gatttatatt	ctaaatttga	tggtatcctt	6780
ctctgcagaa	ataaagtgtc	tgaaagaatg	aaaaaaatgg	aagaatttct	tagtaaggta	6840
taaaataccc	tttctatctt	tgtagcattc	taagcctttt	gtcacctttc	caaactccca	6900
acatgccata	ttccctgact	aggccacagc	catgtacatt	gatcccttta	ttttcttctc	6960
tctgcctgag	atctctctca	ttcccccttc	tctgcctggg	atatgattgc	ccattgttta	7020
aggccccaac	tcacctttat	aatcttccta	gccacttttc	tttatcggta	ttccagaaaa	7080
aacaaaagaa	gcttccacaa	gacaacattc	tgtaatacac	tgcttaactt	cttttgaccc	7140
tgctgagttc	aaaaatctta	tctttttaag	gattgaatgg	agtccaccaa	ggtatctata	7200
tttgacagga	tttatgaaaa	caaaaggatt	tgttgagaaa	gtttgaagcc	taactctgaa	7260
acgtggatca	tagtgtttac	tacacattaa	ctgttttagt	ggatgtaata	gttattatta	7320
taggctgtgg	aatcagaaca	gggttcaaat	gttttcaccg	cttgctagac	tgtggccttg	7380
ggcatgttat	ttaatgcctg	gaggcctcaa	atgttaacta	ggaatggtaa	gacctaccca	7440
gtaacttagc	ataaatagta	aattcattca	tttaatgttt	tcaaacagtg	ccagacattg	7500
tttaatgaac	tggggatata	gtgggtgaaca	acactgacag	cgttcttcat	tgtattctca	7560
aaacctctcc	tatagtaagt	aggtctgtgt	gtgtgtgtag	gtgcatgggg	aataaaaaaat	7620
aataagcaaa	taatgaacag	ggtaatttca	aaaagcagaa	agagctattc	aacaaaaacta	7680
cctgcctttt	attagatgaa	actctcaact	ctatggtttg	ttctctcctg	tcaattctgt	7740
taaatgctgt	cagcctgttt	tccttatcac	cctggccacg	acttctgtct	tttctgcttg	7800
gtcctgtaga	ctctaacc	aggctcattc	tctgcctggc	tatctgcctt	ctgtggctct	7860

ttgccactac	ctacattttc	tgtgttgac	aggggaaggac	cattccctgt	ggaccataaa	7920
attctctttt	tgaagaatt	cattcttgat	tgggccacag	cacatcttgt	gaaacagcat	7980
tagacatttg	ccactgctca	gcagctctgg	gggaaaatgt	ttactgagaa	gcgtacagta	8040
gtttttttga	ctaaccatgg	tgcaacctcc	tcccagaggg	aaacctatga	gtatttcaag	8100
gacatgtgat	ggctctgttt	tgtccccagt	atctgacatg	atgggtagtg	tagagcaaga	8160
gcttacagat	aatggctaaa	ttaaattttc	tttttgaatt	ttaatattca	actttttagg	8220
gtacccaatc	tccatattta	ggaaaataaa	ttacataaaa	agtggagagt	ttttattgtg	8280
aaactgcacc	tccatattcc	cagtggtgca	ggatgagggg	gcacaggtgt	tggctctggg	8340
aagccagggc	cctctgtggg	tctggagggg	gaggattaag	aggaagcctt	agatagtatt	8400
tatgagtatc	tgtctgacttc	tctctggggc	ccaagatcac	tgaacttttg	cctatttttga	8460
gatcatcttt	ccaatccagc	cactaacagc	tgaaggatag	gcttgccctg	gagccattgt	8520
agtggttgga	tgaagataaa	agataaaaaa	ctgtgagggg	aggtgtcaca	gaagaaaagg	8580
cccatgtggg	cagattttca	ttcaattcct	agtctttatt	acagcaattc	tccagtgtcg	8640
caaccttaga	aaaggattcc	tacaacacaa	tgtagggtacc	catcagcagc	agattggata	8700
aagaaaatgt	ggtacatata	caccatggaa	tactatgcag	ccataaaaaa	ggagcaaaat	8760
catgtccttt	gcagcaatat	gaatgcagct	ggaagccaat	aacttaaacg	aattattgtg	8820
gaaacagaaa	aacaaatact	gtgttctcat	ttacaggggg	agctaaacct	tgggtaaatg	8880
gggcataaag	atgggaacaa	tagacactag	ggactccaaa	aggggggagg	gagggaggag	8940
ggcaagggct	ggaaagcttc	ctactgggta	ctttgttcac	aacctgggtg	atggcacgat	9000
taggagctca	aaccccgagta	tcacacagta	taccttgta	acaagctgat	ggtgtaaccc	9060
ctgaatctac	aataaaatta	ttttatttta	aaaaatcatt	ataaggattt	ttaaaaagaa	9120
ggattcctag	acaggtgcag	ccaaacaatt	ttttttaaat	gttggcaggc	cgccaccgcc	9180
agtcacttat	gctgcaatag	cccatgtccc	aacattccca	acctacttct	ctccaaaaga	9240
gaagctatac	tttcagatgg	ccctgtgctg	ggttctccct	ggaagtttct	ggggaaaagg	9300
gcttgagttg	ccccgactgg	actcttccct	gagtggggagc	cggggcttct	gatcagacgt	9360
gagtgaggca	ggaactccgc	ggtctcccag	cgcagcccag	agtgcgggtcc	cacgcagggtc	9420
ccgggtcctg	cgcgctcgcg	cctttgcgct	gaagccgtta	ggatgagccc	tctccttcca	9480
gagctttaac	cgatgaagg	gcattgtgtt	tggcgccctt	gaggaggatg	ctgtcttagg	9540
cctcttccca	ctggacgtgt	gtggtgggca	gagatcccgt	tcgtcggtcg	cacttccacc	9600
ccgctggggc	tcactcaggc	cgcggagctg	cgagggagac	atcctcgatg	gactccctct	9660
acggagatct	cttttggtag	ctggactata	acaaggatgg	gaccttggac	atttttgagc	9720
ttcaggaagg	cctggaggat	gtagggggcca	ttcaatctct	agagggaagcg	aaggtgggtc	9780
tcactggggc	tgtaatcaga	gagacgttgg	ggctggggagc	cctggagagg	cattgggcag	9840
agagggcaaa	atttacatgt	tgtcaagctt	gacctggggc	cactgcagtg	ttcagggtgg	9900
tgaccagcgt	taccgtttat	taagaataac	aacacagcta	acacatttct	caagtatttt	9960
tctccgtttt	ctccttgggt	gtagtataat	ctccaacttc	agattgctct	caagatgttg	10020
gctacatata	gccttgtctt	aggagtcacc	ttgttcaatg	tgctcacctg	tcattagtca	10080
cccagagggg	cgtctaggct	aaagatgcgc	cctccccagt	tcagagaact	ggaataatca	10140
ctctacgtgt	atttgggagt	ggggtggtga	ttggaaattt	tctgatgtta	tgttttgggt	10200
tctgttccctg	gaagggggca	gtggaagtgg	cttttactct	cggttttcac	tagtgctgag	10260
gtttcctcat	aatatgcctt	aattgataga	ccctagtatt	cagtaccgag	cttaggctaa	10320
cccttctctt	ccccagaagg	ctaacctaca	ggctccttct	cagcatgttg	tgcttcgtac	10380
atactcctat	tgcagtattt	ccaagtcatt	tttcatttgg	aatttattat	tgtatataat	10440
aattacttta	taagtatatt	tgtcttttgg	atgtttgacc	cggtagactg	ggagatcatg	10500
agcatgtgga	ctattgagtt	tattttggat	aattgggtact	tcgtgcccaa	aaaactgtca	10560
gttgagttct	gtcatgttga	aatttagtaa	aactctttct	attagccatg	tgaacttttg	10620
gaatattgaa	gcattccattc	agtcatgggt	cagttctagt	ttgagcacat	tctatattcc	10680
aagccccata	ccctgggtatc	ctcatctgtt	atatcagagg	cctggactgt	gtactttctg	10740
tggaccaatt	cagtcacaaa	tgttatttct	gcaaagctta	tctggatttt	taatttctag	10800
aaaaaagcag	tgtttctcct	tttaaagtta	agtgttcttg	ttcagggtgca	gtggctcatg	10860
cctgtaattc	cagcactttg	ggaggccaag	gcagggtggat	cacttggggg	caggagtcca	10920
agaccagcct	ggccaatatg	gtaaaacccc	atctctacta	aaaatgcaaa	aattaaccgg	10980
gtgtgggtgg	gggtgtgtgt	agtcccagga	ggctgaggca	ggagaatcac	ttgagcctgg	11040
gaggcagagg	ttgcagcaag	ctgagattgc	atcactgcac	tccaacctgg	gtgacagagt	11100
gagactccat	ctcaaaaaga	aaaaaaaaaa	gttaagtgtt	cttcatattt	gtttaaagac	11160
actcttatat	ttagattttgc	aagtgttaagt	tgtatttgggt	tatttgatac	aaactagcct	11220

ttcataagaa	attctggggtt	agctatcaag	tcgaatcttt	tgaaacacat	ttcttcctta	11280
ttgaaacaaa	aggttttag	agctgtcttg	catttttggc	aaggacgctt	tgtgtacctt	11340
gtggtgactg	aggagggttc	acatgtcaaa	acccaaggga	ggggtgtccc	cagagaattc	11400
tgcaccaacc	acacagaaca	ttctggttca	gaggagcacc	attgtgactt	ttcctcaagt	11460
ggcagtcaca	tcgttaggag	gttttgatgt	gaggctctctt	cccacacgtc	tccacctccc	11520
cagtaggaaa	atltgtttat	atagacaaaa	ctcaactgat	taaaaaaaaa	aaaaagaaat	11580
gatacttaca	ttgtcgtggt	aagatacaaaa	agcaataact	ttttattgtg	aaaatagtct	11640
gtttttgaac	aatatattgt	tttgtttttt	cctgtgaaag	ttgagaaact	aaatatacga	11700
agagataatg	gtcagaccat	aaataaaaaat	agaactttga	ctcaaaattt	acagcagtct	11760
gccagaaaa	ccagcccttt	atctaaaaata	aacagaccag	gaaaccagcc	tgttatgtca	11820
gacttatagg	aagtcagggt	gctatctcta	gagacaatac	acaaagctat	gcaataactg	11880
ctgtaacagc	cccaaattgt	cagaatttga	ttaataaccg	acagccccc	taattttttt	11940
cttactnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnttc	12000
accgcttgct	agaactgtgg	ccttgggtca	tgttatttaa	tgcttgagg	cctcaaatgt	12060
taactaggta	atggtaagac	ctaccagta	acttagcata	aatagtaaat	tcattcattt	12120
aatgttttca	aacagtgcc	gacattgttt	aatgaactgg	ggatatagtg	gtgaacaaca	12180
ctgacagcgt	tcttcattgt	attctcaaaa	ccctccctat	agtaagtagg	tctgtgtgtg	12240
tgtgtagggtg	catggggaat	aaaaaataat	aagcaataaa	tgaacaataa	aattattttt	12300
tttaaaaaaa	aagaaatgat	acttacattg	tcgtgttaag	atacaaaagc	aataactttt	12360
tattgtgaaa	atagtctgtt	tttgaacaat	atattgtttt	gttttttctt	gtgaaagttg	12420
agaaactaaa	tatacgaaga	gataatgggtc	agaccataaa	taaaaataga	actttgactc	12480
aaaattttaca	gcagtctgcc	cagaaaacca	gccctttatc	taaaataaac	agaccaggaa	12540
accagcctgt	tatgtcagac	ttataggaag	tcagggttgct	atctctagag	acaatacaca	12600
aagctatgca	ataactgctg	taacagcccc	aaatggctag	aatttgatta	ataaccgaca	12660
gcccccttaa	tttttttctt	cacttccaac	ttaggacgaa	ccagagaaaag	ctaaatatgc	12720
accacctact	aatcaaatag	ggtgccgcgt	ttctaataaa	ccctcctaca	gcttccccag	12780
gccagcagcc	cccaatcagg	aaacgcctga	agccttccct	ttttctcact	gtaaagcttt	12840
cccactcctc	tgcttggtt	tgagtctctg	tcaatacaca	agtgagggtg	tctgactccc	12900
ttgctatagc	aaactcgggc	caagtagatt	ttacttttct	catttgattg	gtcttttatt	12960
tctagaagga	acatacaaga	aaatttaaag	gggaatccat	tcctaactct	tcataattata	13020
gtagtccct	tttatctgca	gggcataatt	tccaagacct	ccactgaata	cctgaaactg	13080
tggtgtaatat	tgaaccttat	atatactctc	tctatatata	catatatata	tatatattttt	13140
aatttttttt	tacttttatct	ttaattagct	ttagctcttt	tttttttttt	tgagatggag	13200
tctcactctg	tcaccagggc	tgagtgcagg	ggtgcagtct	tggttcactg	caacctctgt	13260
ctaccgggtt	caagcaattt	cttgtgcttc	aacctccgga	gtagctggga	ctacaggcgt	13320
gtgccaccac	ttcctggcta	attgttttaa	atttttagtag	aaacgggatt	tcaccaagtt	13380
ggccagactg	gtctcgtact	tctgacctca	agtgatccgc	ccacctgggc	ctcccaaact	13440
gctgggatta	caggcgtgag	ccaccatgcg	cccagccata	gactatatat	ttttgatctg	13500
ataactgggt	cagctactaa	gtgactaaca	ggcaagtagc	atctatagtg	tggaatagct	13560
ggacaaaagg	acattcacct	cctgggcagg	atggcacaga	atgttgagag	attttatcat	13620
gctactcaga	atgggtgtgca	atttaaaact	tatgagttgt	ttgtttctgg	agttttccat	13680
ttaatagttc	agaccatgga	ttgaccgcag	gtaactgaaa	ctgtggagag	tgaaactgtg	13740
gataagggag	gactattgta	ttgttaagtc	agactcatta	ggcaatcata	actcttgatt	13800
tgccatcaga	aatgctgcag	aaatatgggt	taaaaaaaac	tgttcaaaaa	tagggtcagg	13860
gatgtccttt	aacttgttac	ttccaaaatg	ttagtgaaaa	ctgtggcccc	aaagagtga	13920
aggaacaaat	gactaagaga	aaatcttggt	ttcaggatga	cagattaaaa	aagaagcaac	13980
ttgctgaaac	actgaaaatc	tctccacttg	taagataaca	caaaactggc	taaaactggt	14040
tggaatgaat	atggccaact	caagtctgca	cagaactaac	ttggtgatgt	tacagcccaa	14100
atttccacca	ctatatttat	actaactccc	cccggatttt	cacacatgat	ctgtgaggta	14160
gcatgaagag	gtaactatgc	atgcctaagg	acttggggaga	cctccccatt	tccttccacc	14220
aatcaccac	taatcccaga	atccgcccc	aaaccttttc	taataactac	cttaaagcca	14280
gcatagggag	acagatttga	gctggactcc	tgtcttcttg	tggttcacct	tgcaataaaa	14340
agcttttctt	ttctcaacac	ctggtattat	agtattgact	tctagttcat	cgggcagcaa	14400
gccccctttg	gtcggtgact	attcttggtc	gctgatattt	ccattggcca	aaatataaac	14460
ctcttagatg	aaacttcagt	acgtaaatgg	cgccacagaa	tgctgtgaca	tttttctctt	14520
ggattatagc	aggttacttt	actgaatacc	gtaggcagtt	ataacacact	aagtatttgt	14580

gtatctaaac	atagaaaaga	tacagtaaaa	atatggtaat	ttttttcaac	tttttagttga	14640
gatttgagg	gtatgtgcac	atgtgttaca	agggtatatt	gcatgatgct	gagggttggg	14700
gtacaattga	accctgtcac	ccaggtagtg	agcatagtag	ccaatcgata	atttttcaac	14760
ccttggtccat	tccctccccg	ttctttagtg	ccccagtttc	tgcttttccc	atctttatat	14820
ccgtgtgcac	cccatgtttt	gctcccatgt	gtatgtgaga	acttgtgggtg	tttgggttttc	14880
tatttctgcg	ttgattcgct	taggataatg	gccttcagct	gcatccatgt	tgctgcagag	14940
gacgtgattt	tattcttctt	tatggctgtg	tagtattcca	tggtgaaaaa	tatagtacta	15000
taaccttact	aaatcactgt	catatatatg	gtctatcatt	gactgaaatg	tatacagtgc	15060
atgatataata	tatatataata	tctataatgt	cttatccatt	tcgtgtatta	tgagatttga	15120
ttgctaataat	tttatacagg	agttttgcat	ctttttcact	agttgacatt	gcttgtaatt	15180
ttcctttttt	tgtgatgtcc	ctggttaggtt	ttagaatcaa	gtgtataccc	gcctcataaa	15240
atgggttgga	aaatgttccc	accctttctg	ttctctggaa	aattgggtgtt	tttttcttaa	15300
agtttggttag	acattattgt	taaaaccatg	gggtcctcga	tttttcttca	tggaatgtt	15360
ttcaaattac	actttaaatt	tctttaaaat	ctgagtatag	ggctatcaga	ctttctgctg	15420
tcttatgtca	gtttttaata	agttgttttt	gtaggcgttt	gttatctcac	tttcatattt	15480
ttgatataaaa	gcttttcata	atatcattaa	tgtctatagt	gtctagtagt	ttccatcttt	15540
actttctgac	attgggttatt	tgccagtttt	aggagtttat	caattttatt	agtcttttca	15600
aagaaccatc	ttttggcttt	gttaatcctc	ccaatgggtg	gttttctttc	tcattacttt	15660
ttgctcttta	tttcttcaaa	cttctttttt	gcttaatttt	aaaataattt	cttgagattg	15720
agataagcct	caatgatggg	tcaccgattt	ccagtccttc	ttcttttcta	attatgcatt	15780
ttaaaccaga	aatctttctc	taagtgtagc	tttagttgca	gctcacaagt	ttcagatctg	15840
tctctcagtc	tgagggttgg	agatctgacc	atgaccatga	aaccatccag	tcacaatgtg	15900
gcattatattt	tttaattttt	tttttttttt	ttgagataga	gtttcactct	tattgcctag	15960
gctgggtgtgc	aatgggtgcga	tctcggtcca	cagcaacctc	cacctcccag	gttcaagcga	16020
ttcttttgcc	tcagcctccc	aagtagctgg	gattacaggc	atgcgccacc	atgcccaact	16080
aattttgtat	tttttagtaga	gatgggggtt	ctccatgttg	gtcagggttg	tcttgaactc	16140
ccgacctcag	gtgatccgcc	cacctcagcc	tcccaaagtg	ctgggattat	aggaatgagc	16200
cactgtgccc	ggcccaactt	ggcattattt	accagaaga	gcatgaccat	gagaacagta	16260
gaatttgtaa	gctttgagtg	ggtgactatg	agtgtcataa	taggtagata	ggttatattt	16320
tgggtggtgg	taggagaggg	cttacagttt	gctatgacag	ctttttatat	ggatcatcct	16380
tagtaaaaaga	ttatttaatt	tttgaatatc	aaggggaaaa	cactagttta	ggctttcttc	16440
tttctttctt	tttttagagac	agggctctgc	tctgtcacca	ggtagaatg	cagtgggtgca	16500
atattgctca	ctgtaacctc	aaattcctgg	gctcaagtga	tcctcctacc	tcagcctcca	16560
agtagctagt	atttacaggc	atgcaccaac	acatctggct	aatttttaaaa	attttttatg	16620
gagatgaggt	ctcactatgt	tgtccagttc	ggtcttgaat	cctgacctca	agtgtacctc	16680
ccccatcagc	ctcccaaagt	gctgcaatat	tttaaactct	gtggtaggtc	aagtgggtgt	16740
cttctatctt	gggggtttata	aagtacatgt	caagaaattt	agggtaggtt	tagattagct	16800
ttaaaaatgt	catgttttat	aaaaatcaat	gcatcatttt	tctgattgaa	aatttaacac	16860
aagactcaga	atctttttgc	agtagtgga	ttacttttat	tatagatctt	tgcgataatg	16920
aatgatgata	catctggcca	aaaataggta	ctatagtctt	ttaggaaaac	agctaactctg	16980
cttgaaatat	gtgtagaaat	aatttagtgc	atcagcccat	attggcaata	acttctctct	17040
aatttttttt	tatagaaaat	ttttactact	ggagatgtca	acaaagatgg	gaagctggat	17100
tttgaagaat	ttatgaagta	ccttaaagac	catgagaaga	aaatgaaatt	ggcatttaag	17160
agtttagaca	aaaataatga	tgggtgtgtc	ttcttttgta	tttatcacca	gctatgaaga	17220
agcatttatc	atgctttcaa	gagtctaaaa	ggatgcttat	ttaatctctc	tggtttttaga	17280
tgataattat	tatttgtgtt	aatacttttt	tttagtaatg	tgatttttat	gtagagttaa	17340
tattatttag	tgaagaaaac	ttatagatag	cttttctttt	tcattacttt	gaaatgtaat	17400
gaattacatt	tctgaattaa	aaactgtggg	cagggcctgt	tgtaaatgtt	aactatggaa	17460
cattatgctg	atttgagtta	aacctgtagg	ttaaaaaata	taattatatt	ttcttgcctc	17520
ctgggtaaaa	tgagatttct	ttttatttgt	atagaagaat	gacagttgtg	tcacttaaaa	17580
tttaaaaaac	tttcagatta	tcttgcatct	gttagttttt	ttggaagaat	taatttagag	17640
aagatatctc	tgatcctgga	aattagggaa	aaatagcata	taaacgttta	agtgtgtacc	17700
ttctgggtta	gattatgact	tctatatatt	gattaatagg	ttggagtgtt	tcttaactctg	17760
ttttctgttg	ctgtaatgga	gtaccacaga	ctgggttaatt	tatgaagaaa	tgaaatttat	17820
ttcttatagt	tctggaggct	gggaagtcca	aagttgagcc	gaatctggtg	agggcctctt	17880
actatgtcat	aacatgctag	caggcatcac	agagcaaattg	cactacctca	gatctctctt	17940

cctcttctta	aaaagccact	agtcccatca	tgggggccct	actctgaaga	ccttatctaa	18000
ttctaattgg	aaatagggtc	ttgaagccct	catcactaga	ggtaaccttt	aacaggaaga	18060
gagaatttat	aaaaattata	atgcagcacc	aaatccctcc	ctacttgtga	atagtcaagg	18120
tcatttcatt	tacagacttg	ttattaaaga	aacagggttaa	acaaatagat	tgagaggaaa	18180
tgtggttcat	gtctgagatc	agcaaacttt	tttgtccaga	agtccagata	ataaatattt	18240
tagctttgtg	ggatcatgtg	tctcagttgt	agctacttgt	ctctgctgct	gtacctcaaa	18300
agcagccatg	gataatatgt	aaatgaatgg	ggatgactga	tttccaataa	aaactttatt	18360
tacaaagata	gttaatacac	cttatttggc	ttgaggggta	tagtttgcca	ttccctgatt	18420
tacaatgaat	attaaagttt	aattcaaagc	aagttccctc	aaacaaacaa	actaaactct	18480
agatgatttt	gaagattatt	cacatctgtg	actctcagcc	aggaagagct	gagtttgggt	18540
tggaaagtag	tactattgga	acatttggtg	cccataagcc	ttacaatata	tgcccctaag	18600
tctagcctta	gtccagctct	ctagcaaaac	tcagttttct	ttcttctctg	caaactttca	18660
ttccaacatc	gaccctctgc	agttcagatt	gtcttgcaag	tcagattgtc	tgtgtgctgc	18720
tatggtaggc	agtagctgag	agatggagct	accttaagat	caattgccag	ataatcagag	18780
gtcaattatc	ccagtgcata	agtagtgtac	atatcaattg	ttcattttat	aaaattctaa	18840
atgaaccaga	ggcaataatt	aaagatgaaa	ttttgatggg	atatttgtag	gaaatctaca	18900
caatgtttcc	ctaatttccc	atgttttgtg	attttaaaac	aatgtggcat	tattggttca	18960
tatttttatt	ttttagactt	ccttaatgca	aaacatatac	agttgatcct	cattatttgg	19020
ggattctgta	tttgcaaatt	tgctactca	ataaaaattt	tccccaaagt	aacccccaaa	19080
tatatactca	cagtactttc	ccaggcattc	atggacatgc	acagagcagt	gaaaaacttg	19140
agttgctcag	catgtacatt	cctagctagt	agaataaggc	aatactctgc	cttcttgttt	19200
cagctctcat	actattaact	agcaagtatc	cctttcaagg	tctattttgt	gccagttttt	19260
gcatttttgt	atttttgttg	gtaatttcct	ttttaaaatg	ttccccaaag	gtagtgtgta	19320
agtgtgtgtc	agtgttccta	agtgcaagaa	agccatagca	tgcccttatgg	agaaaaatata	19380
tgcgttggat	aagctttgcc	ccaaattcaa	tgttagtga	tcaacagcac	acattaaatg	19440
aggtgccttc	aaacagaaac	agacataaga	catgggttat	tattaatcag	ttgatgaaa	19500
tgttgtaatc	agaggctcac	aggaacctaa	ccctgttttt	cctgtaggaa	caatggtttg	19560
gtatttgcta	attcagtggt	tgcaatgaat	atagaacttt	atggaagatg	attgctgtga	19620
ataatgagaa	ttaaccatat	ctctttaaga	gtgcatttct	aaaggagaat	attcagaagg	19680
gtatttgcac	aatttcttta	ctaacagatg	ctgcctctca	ctgtccttac	atggtccaga	19740
ttctcatgct	gtcccttccc	tctccccagg	aggattctct	cagaatcctg	tcactctctc	19800
cagggtccct	tctccaagaa	agtctatcct	ttcaccacta	acagtaattt	tggtcttcct	19860
ctttttctgg	agaagtcagc	tgtttatgct	gcttcagcac	cagaccctct	cttactttgt	19920
tttgtttcat	tctttttcat	gtacagtagt	cttaggattc	tcatgagcct	gtgagctgct	19980
agaaggaaat	acagcagtgc	ttacatttat	tgcttctatt	ttattttcta	ttttctcttc	20040
ctgtctcttg	attgttctcc	ttctgtccac	aaacatgctc	taatttccct	agtattaaaa	20100
attttctgtc	ttttgttggt	cttttatcct	tgctccctta	tttttactgc	cagattttta	20160
tttttattta	tttatttttg	agatggagtc	tcactctgtc	acccaggctg	gggtgcagtg	20220
gcgcgatctc	agctcactgc	aacctccgcc	tcccagcttc	aagcaatttt	cctcttttag	20280
cctcccaagt	agctgggatt	atgggcacct	gccaccatgc	ctggctgatt	tttctatttt	20340
tagtagagac	gggggttcac	catgttggcc	acactgctct	ctaactgctg	acctcaggtg	20400
aaccacccgc	ctcagcctcc	aaaagtgtct	ggattgcagg	tgtgagtcac	tgtgcctggc	20460
cttttactgc	cagattttta	aaagaatagt	ctgtgcttta	gctctatttc	ctcatttact	20520
acttctcttt	aactcagtca	tatatgatgt	tttgcatagt	aaatgtctag	taatttatta	20580
aaaatgtaga	aatagggtact	tttaaaatga	atagatccta	ctttaattga	atttatcttg	20640
gagttagaat	atcttgattt	ggatttttagt	tctgtacttt	cttaattaca	ttacttggtg	20700
aggccacttg	tgaagtcagt	ctctttggag	gaatattatt	tatctataag	gctgttacaa	20760
ttactgaatt	ttaaaaaatg	tgtatttatt	ttttaatgta	tttggtacat	ttttagtatt	20820
gatgttgggg	taggcattta	agcaagtcta	taactcacct	acatgcataa	ttttgcctta	20880
atcagtttaa	agctttctct	taaatgagag	atttgaaatt	cataatttct	gtggttctta	20940
tcagttctga	gttttatttt	ttgccctttt	tattttttta	aaggaaaaat	tgaggcttca	21000
gaaattgtcc	agtctctcca	gacactgggt	ctgactattt	ctgaacaaca	agcagagttg	21060
attcttcaaa	ggtaagctct	tcatgttggg	caacaattga	ctttcacttt	aatatcctgc	21120
attagaactc	tgtgtttgta	agtgtggcct	taaaacacct	ccctagtctt	cattatgtat	21180
atccaagatc	tttttgtctt	ttttctccc	attcattttg	tatgtgtaca	tttatctaaa	21240
gtgtaagaat	gggaagtgtg	agctcagact	ggactctttc	tttcaaggcc	tcaaaggata	21300

gtggaatggc	aggaagtaag	gttttaactc	catagatgag	gagctgaaga	gttttggtgt	21360
tgctttttct	ccatttgatt	tctaattgtga	cagtaaaact	cattgattca	aactaagaag	21420
actagcagat	tcatcacatt	atttaaccta	gatgtgactg	gaaaaaagg	aaattactaa	21480
gctctccaag	ctaacaaaga	aatacctgtt	taaactttca	gaaaaacagaa	atgcaaat	21540
gaaccttatt	gtctggggca	atcagtttga	ctattttaagt	cagactttta	tactctta	21600
gttttgtttc	atgggataga	gcagtaatct	ctgcagccca	ggtgctctca	aatactctgt	21660
tgctataaac	acagggcagg	aactgatttt	ttatgataac	gtaaaacaga	aaaggacaat	21720
tatattgtat	taatattgtt	gtgaatat	tcagtcctca	cattgtctaa	aaatctttct	21780
aaatggcttt	gttattgaat	ttatctcatt	ttatatctgt	gccaacagca	ttttcatcct	21840
ttctcttcat	aatttctttt	acaaacagct	gctcaagagg	aaggctcaaa	gtctcaaggc	21900
tgagcacgta	atgacttttg	ttagtactag	atgagaagg	ctttcctgag	gaaatgaaaa	21960
cctaaaacat	gaaaagaaga	taaacagaat	ttggacagt	agataatag	catataatat	22020
tctgcttcta	aagtaatat	cttctaggaa	agtgaggcg	ttccctggc	tgtaggcca	22080
gaaatcatat	tcctatat	tctttgatag	ctttaggaat	aatgcaaat	ctaagcccaa	22140
gcttcagaat	agactaagaa	gtattagctt	agctgccatg	acaaaatacc	ataggctgga	22200
tgcatataac	aatggaaat	tagtttttca	caggctctgg	agctgggaag	tttaagatga	22260
gagtgccagc	atggttgggt	tgtagtggag	gctctctttc	tggcttgag	atagaccct	22320
tctcactgta	ttgtcatatg	gcagagagag	agagagagag	agagagagag	agagagagg	22380
gatctttctc	ttgctttcta	ttataaggcc	atagtcctgt	tggatcagg	ttccattctt	22440
atgactttat	ttgactttac	ccccctaaga	tgctatctcc	agatataatc	acacggtggg	22500
ttagggcctc	aacatttgga	tttgggagg	acacagctca	gtccatagca	aaggataatg	22560
cagaggggtt	gatattttaa	agtagctaca	caatttttaa	tataaatatt	ttatggtaac	22620
tttttttttt	ttttgagatg	gagtctagct	ctgttgccca	ggctggagcg	caatggtgcg	22680
atctcagctc	actgcaacct	ccgcctccca	ggttcaagca	attctcctgc	ctcagcctcc	22740
tgagtagttg	ggactatagg	cacgcgccac	cacgcctggc	tatttttttt	ttatttttac	22800
tagagacggg	tttgcaccat	attggtcagg	cttgtctcga	actcctgaca	tcagggtgatc	22860
cacccatctt	ggcctcccaa	agtgtcggga	ttacagaagt	gagccaccgc	gcctagccag	22920
cagctttact	gagatgtaat	tcacatgcca	taaattcact	tttctaaagt	atacaattca	22980
gtgactttaa	acatttattt	atttttaaat	tgacagaatt	acatgtattt	atcatgtaca	23040
acatgatgtt	ttgaagtata	tgtacattgt	ggagtgacta	agtctagcta	attaacatga	23100
tacatctcat	acttaatgat	ttctgtggtg	agaacacttt	acatccattc	tcttagtatt	23160
tttcaagaat	ataatatatt	attatttaatt	gtagtcttca	tggtgtatag	tggagctctt	23220
gaacttattc	ctcatgtcaa	gctgaaattg	tgtgtccttt	aacacaaaacc	ataccgcact	23280
cccaaagtat	tctgctctct	gcttctatga	gattaacttt	ttctgattcc	acatgagtga	23340
gatcatgcag	tatttatttg	tctttacctg	gcttatttca	ttcatattgt	tacagataac	23400
aggatttcct	tcttttttta	atggccgaat	agttttctat	tgtatatgta	tagcacattt	23460
tctctcttca	tgcattgggtg	gacacttagg	ttgattccgt	atcttggcta	tcgtgaatag	23520
tgctataatg	aacatgggaa	tgcacatggc	tctttgacat	attgatttca	ttttatatat	23580
gtgtatata	atatgtatac	acacacatac	atacagtgg	gggattgcag	gatcatatgg	23640
tagttctata	tttaattttt	aaaggaactc	catactgctt	tccataatgg	ctgtattagt	23700
ttaactcctc	accaacagg	tgcaaaagtt	cccttttctc	tacataactg	ccaacacttg	23760
ttatcttttg	tctctttgg	aatagtcatt	ctaagtgtag	tatgagggtga	tatctcattg	23820
tggcttttat	ttgcatttct	gtggtaatta	gtgatatcga	gctttttttt	ttttttgtac	23880
tttggccatt	tgtatgtctt	tgaaaaatgt	ctattgggg	tttttggttg	tttatttgag	23940
gttttnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	24000
nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	24060
nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	24120
nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	24180
nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	24240
nnnnnnnnnn	nnnnnnnnccg	gggttcccg	cattctccct	gcctcagcct	ccccgaagta	24300
gctgggacta	ccagggcacc	ggcccaccac	ggcccggtgt	aattttttgt	atgttgagta	24360
gagacgggg	ttcactgtgt	tagccaggat	ggtcttgatc	tcctggcctc	gtgatctgcc	24420
cgctcggcc	tcccagagt	ctaggattac	aggcgtgagc	caccgcgcct	ggcctgattt	24480
ctagtttttt	attattgtgg	tcggaaaaga	aacttgatat	gatttcatte	tgcttaaat	24540
tgtaagact	tgttttgtgg	cctaacatat	gatatcccct	ggtgcatgtt	ccatgtgcag	24600
ttgagaagaa	tgtgtattct	cttgccatta	ggtgaaatgt	tttatgtctg	atctgtccat	24660

ttgttctaga	gtatagttta	agtctgatgt	ttcttactga	ttttctgttg	agatgatttg	24720
tctattgctg	aaggtagggg	gttgaagtcc	cctactattg	ctgtattgca	gtctctctct	24780
cctttcagac	gtattaatgg	tttttatttt	attttatttg	ttgttggtgt	tggttggtgt	24840
gttggttttt	agacggagtc	tcactctgtc	accaggctgg	agtgcagtgg	cagggtctcg	24900
gctcactgca	gcccccgctc	cacgggttcaa	gcgattctcc	tgccctcagcc	tcccagagtcg	24960
ctgggactac	aggcgcatgc	caccacgccc	agctaatttt	tgtattttta	gtaaagacgg	25020
ggtttcacca	tggtggccag	gatgggtctt	atctcttgac	ttcatgatcc	acccgccttg	25080
gcctcccaaa	gtgctgggat	tacaggtgtg	agccaccacc	cctggccaat	gtttgggtatt	25140
tatcttttag	tgctctgatg	ttgggttcat	atataattat	aaaaaacaat	agctacataa	25200
cttattaagg	gatatgcaat	ataaaatata	taaattgtga	cactgaaaat	ttaaaatggg	25260
aggagtggag	taaaagtacc	ttcatataac	ttactattat	atcctcttat	tgaattgacc	25320
cttttatcat	tatataggaa	ctttgtttct	cctttacaac	ttctgactta	aagtttgttt	25380
tatatgatat	aagtaaagtt	actcctgtct	tcctttgggt	tctgtttcca	tggaatatct	25440
ttttccattc	cttcaccatc	agtctgtgtg	tattttttaca	gatgaaatga	gtctgtcatg	25500
ggcagcatat	agttggatct	agttttttta	atccactcag	acactgtgtt	ttttgattgg	25560
ataatttaat	ccattcatgt	tcaaggtaat	tattgataag	taaggacttt	gtactaccat	25620
tttgcttatt	gtttcatggg	tcttttatag	atcctttatt	cttttcttcc	tctcttgctg	25680
tctttttttt	gtggttaagt	gattttctct	agtggtatgt	tttgatttct	tgctttttat	25740
tttttggtga	tctcctattg	gtttttgggt	tgtgggtacc	aagaggttac	aaaaaacatc	25800
ttaagagtta	taatagttta	ttttaacttg	ataacttaat	ttttattgca	aaaaccccc	25860
aaaacaaaaa	aatctacact	tttacttaat	ccctgaaat	tttgaatttt	tgatgtcaca	25920
gtttacctct	tttcatattg	tgtatccctt	aaattattgt	agctattatt	acttttaata	25980
gttttctctt	tctactaca	gatgtaagtg	atttgcatac	catcattaca	gtattatttt	26040
gaatttacct	gtgtactttt	ttttatcagc	cagttttata	ctttcagatg	tttttggtgt	26100
actcattagc	atctttttct	ttcagcttga	ggagctcctt	ttacgtttct	tataaaaatag	26160
gtgcggtcat	gattatctcc	ctcagctatt	gtttgtctgg	gaaagtatct	ctccttcatt	26220
tctgaaggac	actttgctgg	gtacattacc	cttgggtggg	atttttctcc	ttgaacgctt	26280
taaatatatc	atccctttct	ctcctgacct	gttaggtctc	tgtgaccag	tctgtttcca	26340
accatattgg	gactgtctta	tatgttattt	gcttcttacc	ttttgctgtt	ttcaggatcc	26400
tctcattgtc	tttgattttt	gatagtgtga	ttgtaatatg	tcttggggta	gtcttggttt	26460
gattgaatct	gattagagac	cttggacttt	tctgcatgt	agataattac	ctctttctcc	26520
aggtttgga	aattttctgt	tactgtttct	ttaaattagc	tttttacc	ttttatcttc	26580
cttttctcct	tcttcaactc	ctgtgactca	aaactttgct	cttttgatgc	tgttccataa	26640
atcttgtaag	ctttcttcat	tcattttcat	tctttttctt	cctctgtgta	ttttcaaata	26700
acctgtcttt	gagttcatag	tttctttctt	cttcttgatc	acttctgcag	ttgatgctcc	26760
catattgcat	tttaattttg	ttcattgtat	ttttcagccc	catgatttct	gtttgatttt	26820
ttcttttatt	atttcatctc	tttattacct	ttctctttgt	ggtcactcgt	tattttccta	26880
atttcatgta	attgtttctt	tgtattttct	tgaagtttgc	tgagctttct	ttgaattcta	26940
tgtcagttca	tacatctctg	tttctttagg	gatggctcgt	ggtaactttat	tttgtttctt	27000
tagtgggtgc	atgtgttctt	gattgttggt	gatgtttgtg	gccttggtgt	tacatctgtg	27060
catttgaga	agtaggcact	tatttcagtc	tttgcagact	ggctttgtct	gagaatgccc	27120
ttcaacagtc	agcctgtcta	gagattcttt	aatattta	taaatatctt	taatattttg	27180
aagaacttcc	aaattgtttc	taaagtggct	gcaccatttt	ataatcccag	cagcaatgaa	27240
tgaagggttc	agtttctcca	tagctatatg	aatactcatt	actgtctgtc	ttttcatttt	27300
ttgattttta	tttttttttt	gagaaagggt	cttgcctctg	catcccatct	ggagtgcaat	27360
ggcacaatca	tggtcatttg	cagcctcaac	ttccctggct	caattgatcc	tctcacctcc	27420
tgagtacctg	ggactacagg	cattgtacca	caatgcctgg	ctaattttta	tattttttgt	27480
agagatctgg	ttttgccatg	ttgcctgggt	tattagtcca	ttctcatgct	gctataaaga	27540
actgcctgag	actgggta	ttataaagga	aagagggtta	attgactcac	ttttgcttgg	27600
ctgaggagcc	ctcaggaaac	ttacaatcat	gggtggaagg	gaagcaaa	cgtccttctt	27660
cacatgatgg	caggaagagc	agtgcctagc	aaagagggaa	aaaaaccctt	ataaaataat	27720
cagatctcat	gagaagttac	tcactatcat	gagaacatca	gaatgagggt	agcctcctcc	27780
atgattcaat	tacctccac	tgggtccctc	acgtgacatg	tggggattat	tggaaactata	27840
attcaaaatg	agatttgggt	gaggacacag	ccaaaccata	tcatttttgc	cctgggtccct	27900
cccaaatccc	atgttctcac	attgcaaaac	acaataatgc	ctttccagca	gtcccccagc	27960
gtcttaactc	attccagcgt	taacctaaaa	gtccaagggt	tcacagaga	caaggcaagt	28020

cccttctgcc	tataagcctg	taaaatcaaa	agcaaggtag	ttattatact	tcctagatac	28080
aatgagggta	caggcattga	ttaaatatac	ttgttccaaa	tgggagaaat	tggccaaaat	28140
gaaggggcta	caggcccca	gtaagtccga	aatctagtgg	aatagtcaaa	tcttaaagct	28200
ccaaaatgat	ctcctttgac	tccacatcac	acatccagct	catgctaata	caagaagtgg	28260
gctcccatgg	ccttggggcat	ctgcactcct	gtggcttttc	agggtagaca	cccccttctg	28320
gctcttttca	caggctggcg	ttgagtgctt	gtggcttttc	cagggtgcatg	gtgcaagctg	28380
tcgggtggatc	tactattctg	ggtactggag	gatggtggcc	ctcttttcac	agctccacta	28440
ggcagtgtct	cagtggggac	tctgtgtgaa	ggctccaacc	ccacatttcc	cttctgcact	28500
gccctagcgg	aggttctcct	caagggtccc	acccctgcag	caaacttctg	tctggacatc	28560
caggcatttc	catacatcct	ctgaaatcta	ggcagaggat	ctcaaacctt	aattcttatc	28620
ttctgtgtac	ccgcagactc	aacaccttgt	ggaagctgcc	agggcttggg	gcttgcacct	28680
tctgaagcca	tggcctgagc	tgtaccttgg	ctccttttag	ccatggctgg	gatgcagggc	28740
accaagtcct	gagactgcac	aaagcagcaa	ggccctgggc	ctggcccagg	aaaccatttt	28800
ttcctcctgg	gcctctgggc	ctatgatggg	agggcccttc	ctgaagacct	ctgaagtggc	28860
ctggaggcat	tttccccatt	gtcttagtga	ttaacatttc	actccttgtt	tcttatgcag	28920
atctctgcag	ctggcttgaa	ttttttcttc	agaaaataga	tttttctttt	ctgtcacatc	28980
atcaggggtgc	aaatttgaca	aacttttgtc	ctctgcttcc	tgtggaatgc	tttgccactt	29040
agaaatttct	tctgcctgat	accccaaata	atctctctta	ggttcaaagt	tccacagatc	29100
tctagggcag	gggcaaaaag	ccaccagtct	ctttgctata	gcataacaag	agtcactctt	29160
gctccagttc	ccaacaagtt	cctcatctcc	atctgagatc	atctcagcct	ggacttcatt	29220
gcccatatta	ctgtcagcat	tttgggtcaa	gcaattcaac	aagtctctgg	gaacttacaa	29280
actttcccac	ctctttttgt	cttctgagct	ctccaaattt	ttaagaagtt	ccaaactttc	29340
ccagtcttct	tctgaacctt	cctaactgtt	ccaacctctg	cctgttacct	agttccaaag	29400
tcagttccat	atttttgggt	atccttatag	tagcacccaa	ctcctagtac	caatttactg	29460
tattagttca	ttctcacgct	gctataaaga	accacctgag	aatgggtatt	ttataaagga	29520
aagaggttta	attgactcac	agtttcgcgt	ggctggggag	gcctcagata	acttacagcc	29580
atagcagaaa	gggaagcaaa	catgtccttc	acatggtggc	aggaagaaga	agtgtcagc	29640
aaagagggaa	aagccctata	aaaccatcat	atctcgtgag	aactcactca	ctatcatgag	29700
aacagcagca	tgggggttgac	caccccccat	aattcaatta	cctcccacca	gctgtctccc	29760
gtgacacatg	gaaattattg	gaactacaac	tcaagatgag	atttgggtgg	ggacacagcc	29820
aaaccatata	atctaggctg	gtatcgaaat	cctgggtcca	agcaatccac	ccaccttgcc	29880
ctaccaaagt	gctgggatta	caggcatgag	ccaccatata	tgaactgtct	tttgatttct	29940
tttgatttta	accatccatt	gtttctgctt	ctctagataa	ccctgactaa	tatataattg	30000
gtatgaagtg	atatctcatg	gctttgattt	atatttcttt	catggctagt	gacttttttt	30060
gtacttttgg	gatattgtta	ttattattat	tattattact	agtgtttata	cttcttcagt	30120
aaaagtgtta	gaaacaattt	ttaaaggcag	aatgtgacca	gagtttctct	tagttatata	30180
accatcatgg	accttccctc	aagtgttaag	ccattagtgt	tactcatgtc	actccaaatg	30240
tcagcttggt	ttcttccatt	tcactgtctc	tttgtgtccc	aaacttgaat	tcattgggaaa	30300
aacatctgaa	tgggtgctta	tatgggttgg	atatttgtcc	cctccaaatc	tcattgtgaa	30360
atatgacctc	cagtgttgga	agtagggact	acttgggtca	cgagagtggg	tccttcatta	30420
atggcttggt	aataagttaa	ctctattagt	tcattgaaagc	tgggttggtg	taagagcctg	30480
gcattctcatt	tctcttgtcc	ttctctcacc	atctgacaca	cttgctcacc	ttttttcttc	30540
agccatgagt	aaaagcttcc	tgaggctctc	ccagaaactg	agcagatgtt	ggtgccatgc	30600
ttgtacagtc	tgtagaactg	tgagccaaat	aagcctcttt	tctttataaa	ttaccgagtc	30660
tcagggtgtc	gtttaaaaca	acacaaaaca	gactaacaca	gtgttgattg	aaacagctgt	30720
gactgggtca	tcagggtgta	agagaggagt	cactgagttg	aaatatagcc	tcctacttac	30780
acctgttcag	tagaagctgt	agatatgaag	tagctgaagc	aggcattccc	tctgaaacat	30840
gtgtttcaca	tatgtcataa	ttatcttctg	ctctcatttt	tcttttaggc	tttgtctccc	30900
atctcatctc	ccctgtttac	tctcattttc	atatctttac	atttctttct	ccagaattgt	30960
tcagaagctt	ggaaccttcc	actccagtta	ttctttgact	atgcaatttg	tttctgtgct	31020
tcattggcact	tatggtttgt	aatccttgac	ttgtttgtat	agctcagtgg	ttaggagtac	31080
agtttgaggt	tagaatgcct	gggttgaaac	tcttaattct	actctactta	ctagtcttgt	31140
gactataaca	aaattcttag	cctctctttg	tctgtaaaat	ggagagtata	gtaaatacat	31200
gggcttggtt	taaggattaa	atgagttaac	atgtgaaata	cttagaacia	tgcttgccaa	31260
atgctcaatg	aatattgagt	attgcttgct	tttgtttagt	gccatgcctg	ttgttcccac	31320
tgagggcaca	gaccatgtgt	atctgggtta	cagttctatg	tccaccacgt	tgcaataatg	31380

gactctcaga	aaatattgaa	gaatatgtta	aagaatgagt	agaattatgc	tactgaaaag	31440
ggtgagtgga	aggtaggtag	gggaaaggac	atatacagcc	ctggaggcag	catatatggg	31500
gaatgggtca	cacagtgttt	cttggtactc	tctagaccat	agtgggccac	ctcttagcta	31560
gtggcctatg	gattatttca	gcagtctgtt	ggaaacatcc	atgaatatga	taataatgac	31620
ccattttgtgg	gttctaagaa	aaaggacaac	tacaatacta	gacaataata	gtatgtaagt	31680
taggagggaa	ggggatgatt	tgtattaaac	tgttctaaaa	ttcttacctt	atntaggtatg	31740
atgggggtcag	acattaaactt	tagactttgt	tatatatatg	tggtaaaatt	tcaaggtaaa	31800
ccattgaaac	tgtagtagtt	gagtatataa	cttccaaatc	aggggggaaa	gaaatggaat	31860
aagaaaataa	atacataaac	ataagattga	aacaatccaa	tgaagagtag	agagaagagg	31920
gaaaaacata	gaaagaatga	gataattaga	aagcaatagg	taagatgtga	gaaataaatt	31980
caagtacagt	aaaactccac	taaaatgtgc	cctgcagtaa	tgttggggca	tgatttccct	32040
tcacccccat	tctcaaatgg	ggcagcctaa	atagcgttct	tatcctgttt	ccctgggggt	32100
ttgaggtggg	tgacgagtaa	gttagaagat	aatcaccttc	tgatcagtta	ggactttctc	32160
agtttagtct	tcaattaata	aaaattaatg	taaatttcat	cagaaggcag	agattgtcag	32220
atgaaagaac	aagcaaaata	aaagtcttac	tgaaaaaaag	ctggggtagc	tatgttaata	32280
tcaactgtta	attattatta	ataatctatt	aataatagat	tatatagtaa	aaacattaat	32340
aaaaatagag	tgtcactaca	ttttaaaatt	cagtatgagg	atatacaatt	tttaagctgg	32400
ttgataaaat	tctggggatt	aattggcaaa	tccatcatag	tggtagagaga	ttttaacaca	32460
attcttctctg	tatttgatag	gtcaagcaga	gaaaaacttt	agtgaagaca	aaaacttcta	32520
aatacataag	cttgatttaa	tgggcatgta	ataggaccta	gcatcaaaaa	attagaaaaa	32580
atattttttc	ttaggtattt	atggaacatg	tataaaaatt	gatttcgtag	taggccataa	32640
agccagggttc	aacacatttc	aaagaactgg	tatcacaga	actgctttct	ctgaccacta	32700
tgcattaaaa	tagaagttaa	ttacagacat	aaattataaa	aatgccaaata	ttttaaagtg	32760
tgatatacac	ttctcaactt	atgggtcaaa	ggaaatcgta	agtggaaatt	caaggacacg	32820
ttgacttgaa	aacattaaaa	cttatggaat	atttctaaga	tggaaacttg	atgaatttta	32880
tagtctgaaa	gcttttatta	gaaaagaatt	aagtctgaaa	attaatgtgc	taagttaggg	32940
gagagaaaaat	ggaataatct	cgaagaagg	aggaggaagg	agataataaa	gaatatatag	33000
caaagatgca	gtaacaggat	caacaaagcc	agaaactggt	ggaaaagaca	agcctctgga	33060
aagattgatg	aagaaaaaag	agaaatgaga	tgtaaataaa	tcatgttcag	ttataaatag	33120
gcaataaagg	acttttaaaa	aactaataaa	ataatatgaa	tcattaatgc	caataaattt	33180
gaaaacagac	aaagtaggtg	aatttctaga	aaaatataac	ttactgggac	tgaatgaaga	33240
agcaacagct	tatagtacct	aagcaattga	agagattggg	tcagtaattt	aaaattttct	33300
cataaacaaa	acgttagccc	cagatgggtc	ttgcaaatga	ttaaagaaca	gatgtacaaa	33360
catttccaga	gtgtagaagt	acactgtcct	atcctttcta	ggagatcatt	ataacaccaa	33420
aagcagacag	tatatgaaac	agggaaatta	gaggccaaga	tacctatgac	ttatatgtaa	33480
aaatttaaa	aaaatattag	caaactgaat	cagccatttt	aaaaaatata	ccacaatcaa	33540
tgcattcata	agagcagctt	aacaaaattt	gttagaaggc	attaaagaag	actcagtata	33600
gaaaagatgt	accttctctc	caaattgggtg	atagagattc	aatgccatta	aaaaaaccca	33660
cctgggtttt	ttgaggaact	tgtcaagctg	agtctcaaat	ttatatcaaa	gagcaaaggc	33720
ctaagaatat	ccaggacatt	cctgaagaac	tgtgaaggag	caggggcctg	ccctatcaga	33780
taccaagggt	tgttatttaa	ccataaccaa	gtcagtgtctg	tttctacaga	aacagacaag	33840
ttaacaagtg	aaacataata	gagagcccag	aaacagaccc	atccatattt	tggatttgtc	33900
acgtgaaaga	agtagctttg	caaaactttg	ggaaaaggag	agtgtgtgca	atagatgatg	33960
ctcgtgctca	tgcagacaaa	aaggaaattg	ggatacctgc	ctcttacctg	acacaaacac	34020
caacctaaac	gtgaaagtta	aactataaca	gcttgagggtg	gtggggaaga	aatatcttta	34080
tctcagtgtg	gggaagaatt	tattttaaaa	agaagacaca	aaaggccata	cataggaatg	34140
aaaagattga	attcagctgc	attaaaaaga	ttaaattcag	ctgcgttaaa	atcaagagca	34200
tctgtacttg	gacagcatag	agtggaaaga	caaagagaag	gtatttgcca	gcttataact	34260
tgaaggatta	gaatgaatga	tataaagaac	tatgtaaata	agaaaaagac	atacaaccgg	34320
ttagaaaaac	gggcaaagac	atgaacagca	tatttccagt	gaaggaaaca	gcggtagcaa	34380
atgaacatgg	taagagatgc	tcaacacggt	tagtaatttg	aagggaatg	caagttatac	34440
ccacagcaag	actatcttat	ctaggaagtt	tgtcaatacc	ctaaatgttc	tgtggtttta	34500
agctacagag	tttgtaattc	atttatttat	tcaataaata	ctcagtggca	ggcactgttt	34560
tagaaacctt	ggttataact	ttgaatgaaa	ttaaaaaaa	tccttgctt	gtggaggatg	34620
cttatgtgtg	gggagttggg	tgggtggggtc	aaacaacaat	tacattaaaa	tagaaaaatg	34680
tgacataaat	aaacctataa	atattgcaac	ccagagttat	attataaatg	taagtagtga	34740

ctaggactct	catgcagata	tacctctgtg	ctgggacaaa	tgaaagttaa	agtgtaat	34800
cccatatgca	agtcaaaata	aaaagtga	ctagaaaaa	caataatgaa	tatctgaaaa	34860
ttgcatttta	tttgactgcc	atccttttgc	atcattttca	tactaattat	agaataaaa	34920
ttgtaggatg	caccaaagct	tttttttagag	acatccatta	attcaataaa	taaatgagca	34980
ccttctttgt	gccagcagct	gtaagagggtg	gcccgaaggaa	gggaataaaa	cagtcaaaat	35040
cctgggtacac	tcagagtttc	tcttaggaga	aaacagatac	aaatggcatt	aattaccaag	35100
aaacttgtaa	aacaagccaa	atattaatga	taaataatttg	agtacagtat	gttaatttta	35160
agattgaaaa	tgaggtgcc	ggatttctta	agactcaaa	gcgaagatgg	ctgaatagga	35220
acagctctgg	tctacagctc	ccagcgtgag	cgacgcagaa	gacgcgatgat	tgctgcattt	35280
ccatctgagg	taccgggttc	atctcactag	ggagtgccag	acagtgggag	caggtcagtg	35340
gggtgtgtgca	ccgtgcgcga	gctgaagcag	ggcgaggcat	tgctcactc	gggaagtga	35400
aggggtcagg	gagttccctt	tcctagtcaa	agaaagggtg	gacagatggc	acctggaaaa	35460
tcgggtcact	cccacctgaa	tactgcactt	ttctgacggg	cttaaaaaat	ggcgaccag	35520
gagattatat	cctgcacctg	gctcggagg	tcctacaccc	acggagtctc	gctgattgct	35580
agcacagcag	tctgagatca	aactgcaagg	cgcgccgag	gctgggggag	gggcacccgc	35640
cattgcccag	gcttgcttag	gtaaacaaag	cagccgggaa	gctcaaaactg	ggaggagccc	35700
accacagctc	aaggaggcct	gcctgcctct	gtaggctcca	cctctggggg	cagggcacag	35760
acaaacaaaa	agacagcagt	aacctctgca	gacttaaatg	tccctgtctg	acagctttga	35820
agagagcagt	ggttctccca	gcacgcagct	ggagatctga	gaacgggcag	actgcctcct	35880
caagtgggtc	cctgacccct	gacgcccag	cagcctaact	gggaggcacc	ccccagcagg	35940
ggcacactga	cacctcacac	agccggttac	tccaacagac	ctgcagctga	gggtcctgtc	36000
tgtagaagg	aaaactaaca	aacagaaagg	acatccacac	caaaaaccca	tctgtacatc	36060
accatcatca	aagacaaaaa	gtagataaaa	ccacaaaagat	ggggaaaaaa	cagagcagaa	36120
aaactggaaa	ctctaaaaag	cagagtgcct	ctcctcctcc	aaaggaaacgc	tgttcctcac	36180
cagcaacgga	acaaagctgg	atggagaatg	actctgacga	gctgagagaa	ggcttcagac	36240
gatcaaatta	ctctgagcta	tgggaggaca	ttcaaaccac	aggcaaaagaa	gttgaaaact	36300
ttgaaaaaaa	tgtagaagaa	tgtataacta	gaataaccac	tacagagaag	tgcttaaaag	36360
agctgatgga	gctgaaaacc	aaggctcgag	aactacatga	agaatgcaga	agcctcagga	36420
gctgatgcga	tcaactggaa	gaaagggtat	cagcgatgga	agatgaaatg	aatgaaatga	36480
agcgagaagg	gaagttaga	gaaaaaagaa	taaaaagaaa	cgagcaaaagc	ctccaagaaa	36540
tatgggacta	tgtgaaaaga	ccaaatctat	gtctgattgg	tgtacctgaa	agtgcagggg	36600
agaatggaa	caagtggaa	aacactctgc	aggatattat	ccaggagaac	ttccccaatc	36660
tagcaaggca	ggccaacatt	cagattcagg	aaatacagag	aacgccacaa	agatactcct	36720
tgagaagagc	aactccaaga	cacataattg	tcagattcac	caaagttaga	atgaaggaaa	36780
aatgtttaag	ggcagccaga	gagaaagggtc	gggttaccct	caaatggaag	cccatcagac	36840
taacagcgga	tctcttggca	gaaactctac	aaaccagaag	agagtggggg	ccaatattca	36900
acattcttaa	agaaaagaat	tttcaaccca	gaatttcata	tccagccaaa	ctaagcttca	36960
taagtgaagg	agaaataaaa	tcctttacag	acaagcaaat	gctgagagat	tttgtcacca	37020
ccaggcctgc	cctaaaagag	ttcctgaagg	aagtgtctaa	cttggaagg	aacaatcagt	37080
accagccgct	gcaaaatcat	gccaaaatgt	aaagaccgtc	gagactagga	agaaaactgca	37140
ttaacaaacg	agcaaaataa	ccagctaaca	tcataatgac	aggatcaa	tcacacataa	37200
caatattaac	tttaaatgta	aatggactaa	atgctccaat	tgaaagacac	agactggcaa	37260
attggatata	gagtcaagac	ccatcagtg	gctgtattaa	ggaaacccat	ctcacatgta	37320
gagacacaca	taggctcaaa	ataaaaggat	ggaggaagat	ctaccaagca	aatggaaaac	37380
aaaaaaagac	aggggttgca	atcctagtct	ctgataaaac	agacttttaa	ccaacaaaga	37440
tcagaagaga	caaagaaggc	cattacataa	tggtaaagg	atcaattcaa	caagaagagc	37500
taactatcct	aaatatatat	gcaccaata	caggagcacc	cagattcata	aagcaagtcc	37560
tgagtgcct	acaaagagac	ttaaactccc	acacattaat	aatgggagac	tttcacacc	37620
cactgtcaac	attagacaga	ccaatgagac	agaaagtcac	caaggatacc	caggaaatga	37680
actcagctct	gcaccaagca	gacctaatac	acatctacag	aactctgcac	cccaaatcaa	37740
cagaatatac	atTTTTTTTca	gcaccacacc	acggctattc	caaaattgac	cacatacttg	37800
gaagtaaaagc	actcctcacc	aaatgtaaaa	gaacagaaat	tatagcaaac	tatctctcag	37860
accacagtgc	aatcaaaacta	gaactcagga	ttaagaatct	cactcaaaac	cgctcaacta	37920
catggaaaact	gaacaacctg	ctcctgaatg	actactgggt	acataacgaa	atgaaggcag	37980
aaataaagac	gctctttgaa	accaacaaga	acaaagacac	aacataccag	aatctctggg	38040
acgcattcaa	agcagtgtgt	agagggaat	ttatagcact	aaatgcccac	aagagaaagc	38100

aggaaagatc	caaaattgac	accctaacat	cacaattaaa	agaactagaa	aagcaagagc	38160
aaacacattc	aaaagctagc	agaaggcaag	aaataactaa	aatcagagca	gaactgaagg	38220
aaatagagac	acaaaaaacc	cttcaaaaaa	ttaatgaatc	caggagctgg	ttgtttttga	38280
aaggatcaac	aaaattgata	gaccgctagc	aagactaata	aagaaaaaaa	gagagaagaa	38340
tcaaatagac	acaataaaaa	atgataaaag	ggatatcacc	accaatccca	cagaaataca	38400
aactaccatc	agagaatact	acaaacacct	ctatgcaaat	aaactagaaa	atctagaaga	38460
aatggataaa	ttcctcgaca	catacacctt	cccaagacta	aaccaggaag	aagttgaatt	38520
tctgaataga	ccaataacag	gatctgaaat	tgtggcaata	atcaatagct	taccaaccaa	38580
aaagagtcca	ggaccagatg	gattcacagc	cgaattctac	cagaggtaca	aggaggaact	38640
ggtaccattc	cttctgaaac	tattccaatc	aatagaaaaa	gagggaaatcc	tccttaactc	38700
atttttatgag	gccagcatca	tcttgatacc	aaagccaggc	agagacacaa	caaaaaaaga	38760
gaattttaga	ccaatatcct	tgatgaacat	tgatgcaaaa	atcctcaata	aaatactggc	38820
aaactgaatc	cagcagcaca	tcaaaaagct	tatccaccat	gatcaagtgg	gcttcatccc	38880
tgggatgcaa	ggctgggttca	atatacgcaa	atcagtaaat	gtaatccagc	atataaacag	38940
aaccaaagac	aaaaaccaca	tgattatctc	aatagatgca	gaaaaagcct	ttgacaaaat	39000
tcaacaacac	ttcatgctaa	aaactttcaa	taaattaggt	attgatggga	tgtatctcaa	39060
aataataaca	gctatctatg	acaaaccac	agccaatatc	atactgactg	ggtaaaaact	39120
ggaagcattc	cctttgaaaa	ctggcacaag	acagggatgc	cctctctcac	cactcctatt	39180
cgacatagtg	ttggaagtcc	tggccagggc	agttaggcag	gagaaggaaa	taaaggggat	39240
tcaattagga	aaagaggaag	tcaaattgtc	cctgtttgca	gacgacatga	ttgtatatct	39300
agaaaacccc	attgtctcag	cccaaaatct	ccttaagctg	ataagcaact	tcagcaaagt	39360
ctcaggatac	aaaatcaatg	tacaaaaatc	acaagcattc	ttatacacca	gcaacagaca	39420
gagagccaaa	tcatgagtga	actcccgttc	acaattgcta	caaagagaat	aaaataccta	39480
ggaatccaac	ttacaagggg	tgtgaaggac	ctcttcaagg	agaactgcaa	accactgctt	39540
aatgaaataa	aagaggatag	aaacaaatgg	aagaacattc	catgctcatg	ggtaggaaga	39600
atcagtatcg	tgaaaatggc	catactgccc	aaggcaattt	acagattcaa	tgccatcccc	39660
atcaagctac	caatgacttt	cttcacagaa	ttggaaaaaa	ctacttttaa	gttcatatgg	39720
aaccaaataa	gagcccgcat	tgccaagtca	atcctaagcc	aaaagaacaa	agctggaggc	39780
atcatgtctac	ctgacttcaa	actatactac	aaggctacag	taaccaaacc	agcatggtac	39840
tggtagcaaa	acagagatat	agaccaatgg	aacagaacag	agccctcaga	aataacgccg	39900
cacatctaca	actatctgat	ctttgacaaa	cctgagaaaa	acaagcaatg	gggaaaaggat	39960
tccctatttta	ataaatgggtg	ctgggaaaaac	tgggtagcca	tatgtagaaa	gctgaaaactg	40020
gatcccttcc	ttacacctta	tacaaaaatc	aattcaagat	ggattaaaga	cttaaacggt	40080
agacctaaaa	ccataaaacc	cctagaagaa	aacctaggca	ttaccattca	ggacataggc	40140
atgggcaagg	acttcatgtc	taaaacacca	aaagcaatgg	caacaaaagc	caaaattgac	40200
aaatgggatc	taattaaact	aaagagcttc	tgacacagca	aagaaactac	tatcagagtg	40260
aacaggcaac	ctccaaaatg	ggagaaaatt	tttgcaacct	actcatctga	caaagggcta	40320
atatccagaa	tctacaatga	actcaaacaa	atttacaaga	aaaaaaacaa	acaaccctat	40380
caaaaagtgg	gtgaaggaca	tgaacagaca	cttctcgaaa	gaagacattt	atgcagccaa	40440
aaaacacatg	aaaaaatgct	caccatcact	ggccatcaga	gaaatgcaaa	tcaaaaccac	40500
aatgagatac	catctcacac	cagttagaat	ggcaatcatt	aaaaagtcag	gaaacaacag	40560
gtgctggaga	ggatgtggag	aaataggaac	actttttacac	tgttggtggg	actgtaaact	40620
agttcaaccc	ttgtggaagt	cagtgtggca	attcctcagg	gatctagaac	tagaaatatc	40680
atttgacca	gccatcccat	tactgggtat	atacccaaaag	gactataaat	catgctgcta	40740
taaagacaca	tgacatgta	tgtttattgt	ggcactattc	acaatagcaa	agacttggaa	40800
ccaagccaaa	tgtccaacaa	tgatagactg	gattaagaaa	atgtggcaca	tttacaccat	40860
ggaatactat	gcagccataa	aagatgagtt	catgtctttt	gtagggacat	ggatgaaatt	40920
ggaaatcatc	attctcagta	aactatcaca	agaacaaaaa	accaaaccac	gcatattctc	40980
actcataggt	gggaattgaa	cagtgagac	acatggacac	aggaagggga	acatcacact	41040
ctggggactg	ttgtgggggtg	gggggagggg	gagggatggc	attgggagat	atacctaattg	41100
ctagatgacg	agttagtggg	tgacgagcac	cagcaaggca	catgtatata	tatgtactaa	41160
acctgcacat	tgtgcacatg	taccctaaaa	cttaaaagtat	aataataaaa	aaaaaagact	41220
caaaggcaca	gtcactgaca	gtttgatttt	ttataatagc	tgtaattttt	cctaacttcg	41280
aggaagttag	tagcatgttt	tgagtatat	tcaaaactac	attcaaattgt	tgcaatagaa	41340
cattaagaat	tatcttcatg	atccactaag	tgcatgaaaa	aaatggataa	tgaatctatt	41400
cattaccatc	gtttaatatt	ttatcttcaa	gttttttgtgt	ttttagctc	attggcagag	41460

tttgacagag	tgctgaaagt	attcttttagt	gagctggctg	taatttttgg	gcccattttt	41520
atctagataa	ttaaaactat	ctgacaggac	cataaaatgc	ttgctgccat	ttccaacaac	41580
ctatatattgt	ggatgggggt	ttttaattta	atgagaatat	tatgttagaa	aagaaactgt	41640
cattctgttaa	agtggccaat	aatgttagtt	ttatttatca	atttagtttt	gtactttgat	41700
cattttttta	aaatttcagc	attgatgttg	atgggacaat	gacagtggac	tggaatgaat	41760
ggagagacta	cttcattatt	aatcctgtta	cagacattga	ggaaattatc	cgtttctgga	41820
aacattctac	agtaagtcta	ctttatgtat	ttatacttat	ttggagctat	aaaccatagg	41880
tacagttatc	acccaagaac	actctgtaac	acttatgggc	caggatacct	gagtcccagt	41940
agctccttaa	cctgtagagt	tctattttatt	ctattaggca	tagattttata	gagtattaaa	42000
caaaaaaaaa	cagctctccc	tctccctctc	cctctctctc	ccccccccca	cgttctccct	42060
ctccctctct	ttccacgggc	tccctctgat	gccgagccaa	agctggactg	tactgctgcc	42120
atctcggctc	actgcaacct	ccctgcctga	ttctcctgcc	tcagcctgcc	gagtgcctgc	42180
gattgcaggc	gcgcaccgcc	acgcctgact	gtttttcgta	tttttttggg	ggagacgggg	42240
tttcgctatg	ttggccgggg	tggctctccag	ctcctgaccg	cgagtgatcc	accagcctcg	42300
gcctcccgag	gtgctgggat	tgcagacgga	gtctcgttca	ctcagtgtct	aatggtgccc	42360
aggctggggg	gcagtggcat	gatctcggct	cgctacaacc	tccacctccc	agccgcctgc	42420
cttggcctcc	caaagtgcc	agattgcagc	ctctgccag	ccgccacccc	gtctgggaag	42480
tgaggagcgt	ctctgcctgg	ccgccatcg	tctgggat	gaggagcccc	tctgcctggc	42540
tgcccagctc	ggaaagttag	gagtgtctct	gcccgccgc	catcctgtct	aggaagttag	42600
cgtctctgcc	cggccgcccc	tctctggga	tgtgaggagc	ccctctgcct	ggctgcccag	42660
tctggaaagt	gaggagcgcc	tcttcccgcc	cgccatcccc	tctaggaagt	gaggagcgtc	42720
tctgcccgcc	cgccatcgt	ctgagatgtg	gggagcgct	ctgccccgcc	gccccgtctg	42780
ggatgtgagg	agcgctctg	ctcgcccgcc	ccgtctgaga	agtgaggaga	ccctccgccc	42840
ggcagccgcc	ccgtctggga	agtgaggagc	gtctccgccc	ggcagccacc	ctgtccggga	42900
gggaggtgga	ggggctagcc	ccccgcccgg	ccagccaccc	catccgggag	gtgaggggtg	42960
cctctgcccc	gccgccccta	cagggaagtg	aggagccct	ctgcccggcc	accaccccat	43020
ctgggaggtg	tacccaacag	ctcattgaga	acgggccatg	atgacaatgg	cggttttgtg	43080
gaatagaaaa	aggggagagg	tggggaaaag	attgagaaat	cggatggttg	ctgtgtctgt	43140
gtagaaagag	gtagacatgg	gagacttttc	attttgttct	gtactaagaa	aaattcttct	43200
gccttgggat	cctgttgatc	tatgacctta	cccccaaccc	tgtgtctctc	gaaacatgtg	43260
ctgtgtccac	tcagggttaa	atggattaa	ggcggtgcaa	gatgtgcttt	gctaaacaga	43320
tgcttgaagg	cagcaggctc	gttaagagtc	atcacctacc	cctaactctca	agtacccagg	43380
gacacaaaca	ctgcggaagg	ccgcaggggtc	ctctgcctag	gaaaaccaga	gacctttgtt	43440
cacttgttta	tctgttgacc	ttccctccac	tattgtcctg	tgacctgcc	aaatccccct	43500
ctgcgagaaa	cacccaagaa	tgatcaatta	aaaaaaaaaa	aaaaaaaaaca	acccaagact	43560
gcataaatgt	ccattctgaa	aacttggaag	aagtaccacc	ttgatgaata	agctgtctag	43620
cttttatttg	catttaagta	ttctgccata	gggaagtgt	aaagttgtag	gcttttactt	43680
tttataggta	ctatattgtc	caaataatct	cagcacctca	tggttgctaa	ggatctgtgt	43740
ccttgtttgg	tcagattatg	tttatctctg	gcataaggca	cttaacaata	ttcattaaag	43800
gttacagaat	ctttttgctt	catctgctta	gcatttcata	ccagtttggt	ttccaccaa	43860
ctttcaaatt	ttgattgttt	cattaatatt	ctgcatactg	atgtaaacca	agttctatta	43920
ttgtgcaatc	tgctcctgaa	acccttagga	actctctgaa	ggagttttat	ttattttttg	43980
tttttgtttt	tgtttttgtt	ttgttttttt	gagacggagt	cttgctctgt	tgcccaggct	44040
agagtgcagt	ggtgcgatct	cggctctctg	caaactcggc	ctccgggggt	cacgccattc	44100
tctgcctca	gccaccggag	tagctgggac	tacaggcacc	caccactgcg	cctggcta	44160
tttttttgta	tttttagtag	agacgggggt	tcaccgtgtt	agccaggatg	gtctcgatct	44220
cctgaccttg	taatccgccc	gcctcgccct	ccaaagtgtc	gggattacag	gcgtgagcca	44280
ctgtgcccgg	cctttttttt	ttttttttct	ttatgggctt	gtcttctaca	cttcagattt	44340
gactaaatta	aatatgcatt	aaatgaagtc	aggagttcac	attgccacta	gtaacaatgc	44400
ctaagcttac	ataaagcatt	ataaaattgt	tgggtattag	tgcttctca	gctatgagta	44460
taagataata	ttatactagt	agttcagttg	cctagataaaa	ttgtacacta	tgtgaagttt	44520
tatttacata	attcttacgg	tattttttta	ggtagttgat	aacagttgag	actacaattg	44580
tatctccatt	ttattgatag	taaaatgaag	gaagggaggg	ttactacat	aggagagctc	44640
ctccccgttg	cactcttgcc	tgtaaaaatt	tttctgccaa	aacaatttag	ataatagaat	44700
tgtaaaaata	ttattataga	attgtttctc	tcaaactata	gtaatgtaga	atagggtgaa	44760
ggggtgatga	tttgaaacaa	tacctctcca	ttagctaaat	tttatataga	atctattgca	44820

tgtttttaaat	gataagtcag	at ttataaaa	atattttttat	aaacagtagg	aatgagttt	44880
aggggtattc	acatacagtt	ttaatttttta	tttacatatt	taaaacatat	catgggtataa	44940
atatgatgtg	gatataaatt	tgagataaag	gaagtattgt	ttaagaattg	atgaactaat	45000
ttcttaaaag	atgtcatcac	cagttgggtt	tctagcctta	tgaaaaatgg	ttgcaataaa	45060
aaagattgac	tatgataaaa	tgctgcccct	tcat ttttaac	ctagaccaag	agaaaaacata	45120
ctgtgaatct	atgatgaatg	aaagaaagtt	gtaactgttg	gttttgtata	tttgttaatta	45180
ctgtttat t t	tcat tttcttg	tgaactgata	ctgtactttg	ttcattgtga	gtagacaact	45240
tataatctat	gtactcaaat	tggtttagta	taaattctag	ggaatgaagt	tcatat taaac	45300
tgtaaaataa	catgattgtt	ctctaaaaca	aaacgtcttc	tgggattatt	tttaactaag	45360
gcgc atgggg	atcttttttt	cattttttaca	gggaattgac	ataggggata	gcttaactat	45420
tccagatgaa	ttcacggaag	acgaaaaaaa	atccggacaa	tgggtggaggc	agctttttggc	45480
aggaggcatt	gctgggtgctg	tctctcgaac	aagcactgcc	ccttttgacc	gtctgaaaaat	45540
catgatgcag	gtgagcttta	ttatcgtgtg	tccaggtttg	ccctaaatat	tctaaaacaa	45600
tgagaaaatgt	gggtgctttga	aaaagaagtt	ttaaaatttc	tcagtaataa	tctttttatac	45660
cctaaaaaat	aaatctat t t	tgttgctgtt	aactctaaat	tcagtccatg	taagtatggc	45720
agtgtacca	accttaaat	gttagtacat	gtgtgtaatg	aacttttaat	ctttggcatt	45780
ctatgactat	tcaaacattt	aattcaaaaa	atatctctag	ctattgttgt	aggattctcc	45840
tgatttatag	tttcttctt	tttaatat ac	tttatcaaaa	gtaaagtatt	tttgaaatct	45900
agactcttag	agcagcaatg	taattttgaa	aattattcta	aagctgaggt	tagcagaaaa	45960
agatctggct	ttatagactg	actttgctat	ttactagcag	tgtagcattg	ggctggccag	46020
agtggaaaaga	gggaatggaa	aagaattaat	atgtattttgc	tcactgtggt	aaccagttta	46080
atccttgacag	cagcccagtg	aagtaggtat	tttatcattt	ttccaggggg	aatctgaggc	46140
ccagagaatt	gacttttctt	ttacaacaaa	tgagagggggg	aatgcagtat	ctttgcctcc	46200
agtgtctctg	gttctcatgc	tgcatgaaac	ctctgagggtc	tcat ttttctt	tcat tctggg	46260
atggggataa	gaatatctaa	taagaatgg	ttagaatca	agcaatatca	ggtatgtgat	46320
aatgtctgg	acactggaat	aacctattgg	aacatagtag	ttgtttacaa	aatatttttta	46380
aaactttgtt	atacttatgg	tcaacacttt	ttatat tttgt	ctgtagattt	ctgtacaaaa	46440
agattctgac	actgttttaa	gccagcattc	cttcagaatg	tacccaatc	tcaaaatttta	46500
tttaggggca	aagcta atgc	tttaaagaaa	aaggagaggg	gattgggtgtg	tg tttttctt	46560
taggaacagt	agtaacttga	cttttagaga	acttgaataa	gcatttattt	tttcttttgt	46620
cctatttttat	tgtgaagt t t	atttat t tta	aataaaatgg	atttctctgg	aat ttagttt	46680
ctgcaaaattt	gaggagt t t c	caaagtcaac	cttcagg t t t	gatacttctc	tagaaagact	46740
cacataactc	actgaaagct	tattaccctt	ggttatgggt	tattacgggg	aaaagatgcg	46800
gatgaaaatc	agtcaagtaa	agaagcacat	agggcagagc	ttctgttgtc	ctctccctgt	46860
ggagtctcca	tgtcttactt	tcctggcact	gttatgtggc	actaggcatg	gaatattgca	46920
gaccaaccag	ggaagctcac	ctgagccttt	gggtgtgcaga	gttcttattg	gggcctgttt	46980
tcatactggc	cacatggctg	gccttcagaa	ttcaaccctg	tctgtgagtg	tgtgtgtgtg	47040
tgtgtgtgtg	tgtgtgtgtg	tg ttttagtg	tagtcacccc	ttttatgtga	gctgaaacaa	47100
tcagaagaat	agctgatttg	tttaattatt	tttgggtgat	tggacttaat	cagtttttat	47160
ctgtagggtg	tcataaggta	cagtattttt	aagtgactac	cacatctgta	gtataagcca	47220
agtaatttat	cagtactcac	aggatgggtta	catgtttgtta	tgaatttatt	gcctagagag	47280
ggcctcaaaa	tatgccaaag	aggggtgcaat	ttttattttt	ggtttcaggc	tgtatgcatt	47340
ccagtgttgg	tagccctgat	atacacaata	tccaaaccat	ttcagaccca	tttacagttc	47400
atgtctgtac	tacttcttga	ggagagggag	taacatatta	cttttaaatta	tatgtaataa	47460
tatacatata	ttaaattata	tgtataataa	taatattatt	atttgcagta	tacttttttta	47520
tttcccttta	actgagcttg	ttcatgtttc	aaagggtgtt	ccattgcctg	atacataatt	47580
tagttaatat	tatcttatga	aggttg t t t c	taattttaat	actcttcttg	tcttctctct	47640
ctgctttctc	acactgaaga	taccaattat	tcttagtttt	agagtcagag	acaggcctct	47700
aaaatcatgg	caatactccc	tctcatcatt	atataatttt	ttcaaccctt	ctataatttta	47760
ttttcaaaata	tatcttcttg	cagtttagaaa	cggttattgaa	aaagattgtg	tggttgttct	47820
agaaaaagta	atagtaatat	gccaccagca	ttttatatca	ttctgctttt	at ttttaggt	47880
tcacggttca	aaatcagaca	aaatgaacat	at t tgggtggc	tttcgacaga	tggtaaaaaga	47940
aggaggatc	cgtcgtcttt	ggaggggaaa	tggtaacaaac	gtcatcaaaa	ttgctcctga	48000
gacagctgtt	aaattctggg	catatgaaca	ggtaattgtt	atcaccctgt	gaatttatta	48060
acaaagagga	gttagtaaac	ggattcaata	aatgttaatg	tataatgctt	ttgggattct	48120
tg ttttaata	catgataatc	tttcacatat	accccataag	gaggatcact	tataggagat	48180

tagactaaat	aaaatcagag	atctctcatg	accaagttat	gggattctta	attcatcata	48240
ttattttataa	agtttttttt	ttctaagtag	ttcttaaagg	aagggtagaa	ttttagttta	48300
ttcattctga	atcctgagca	gaagcagcac	actaacataa	gttttatgaa	agtgtcacaa	48360
tctaacctct	ggaaggaaaa	ctataagttg	aagtcctttg	tgtaatttga	cgttgctgta	48420
aaattgagct	gagtttggag	tgacacctcc	atgaaggcag	gggcgtggct	tcttccccat	48480
gtactccagc	acctagacag	agcttggcat	gtgataagtt	tcaagcgagt	gttgaatgag	48540
tcaatgaatg	aacaaatgca	tttacctctg	aatcacttct	ctgtcggctt	ttgttaactt	48600
ggattatttg	agctattgct	tcagcctaac	tcaatgtaaa	ggggaaatac	agaggtaagt	48660
tttagagttt	gggttctctt	tatggtcatt	agcagaactg	tctagttgag	cagccacaga	48720
ttatgttttc	cattatttat	tccatcattg	tttatcaagg	actgtaaggg	ccttgaaatt	48780
caactcccc	ccccatagtt	tttgattat	tccatgtaga	ttttagatta	ttctggagag	48840
tgttttgttc	ttgagcaaca	gaatactctt	gagaagatta	cgaagtccag	tggtatcctt	48900
ttctttgcct	aggaaataga	gaagcaaaaa	aaaaaaaaaa	aaaaaattaa	agaaaaacta	48960
gtctccagga	ttttaattag	aacctatcct	tgggaaggct	attttcctta	tatgaaggtt	49020
tgaagattca	aatcatgatt	attaagggct	aatgtttgag	atacccttag	gttattctga	49080
ccacatactt	ggatttttatg	ataggaaaagc	cacagcctaa	aataaataaa	tactcaatgc	49140
agttattttca	gtatgcaaga	agtttggtat	ttttgaaaaa	gtccatgggt	attgcaagca	49200
aatatgcaca	ttttgcttta	tgccatttgt	cagattctta	ccttggatac	caccaacagg	49260
catcctctgc	ttctgtccac	ccaagctcct	tcttgagacc	tctttatagt	attgtgattt	49320
ctgcacacta	actttcttag	acatgaagag	aaagctgtct	acacagtgtg	gtgtagtttt	49380
cttatgggct	ctggacctat	ggtgctgttt	tctctcctcc	tgctgaagg	ccattcatcc	49440
ctcggggctc	tctaaaagcc	accttcctgt	gacaagcata	tactaagcat	ctcaatcaaa	49500
gccagttcct	ccctgttcca	gcctccctcg	agtgtgtaat	tgagaatat	cccatttttc	49560
attggatgat	ggaaaaccca	ttgttttccc	agtggattgt	aaattacttc	ggggtaaata	49620
ggctgtatat	attctcaaat	ttcccagagt	atgtaactag	gtcactttta	gattcagata	49680
gattttgttc	cttgaatagc	tagtacttta	ggaaactaag	aaaaagatct	tttcaacctg	49740
gtatgtagct	ctgtcaaaca	catcatcagt	atggggtaaa	cctgtgttct	ctgtgggttg	49800
tcattaccat	agtagtgtca	ttgtatcatt	gacagtgtaa	tagtgtgggg	tagtgttctt	49860
gtgggttcag	ctgccactct	gtactgactg	ctttccactc	caacatcttc	ctctttatct	49920
caacactgta	ggtctacctg	tgtactgtgt	gtttcagcat	ctctgcttgc	atgaccagg	49980
agtgctccc	actcaatatg	gccaccatgc	atggctactc	ttctgtact	ccctgtctcc	50040
tgacctgct	ccagcaacac	agacagacac	ccttctctct	tctatatgtc	atatggtggg	50100
gaatgccctt	tagtacttac	tcaggagtta	gttctctctg	gaagccttct	gttctagttt	50160
ccttttggtta	cagcactttc	acattgaatt	ctgacgttct	ctgtacttat	ctgctttgtg	50220
agactgtgag	cttcttagg	cagtagctac	ttgtattctt	agcaccttgc	ccagtgccag	50280
gaaaccctta	ttaagtaaat	gaaaagacag	aactgacaga	ctggaattag	agctcaagct	50340
tgctcaatc	tcaagccatt	aagatgaagg	ggagccgggc	gtggtggctc	acgcctctaa	50400
tcccagcact	ttaggaggta	gtttgcttga	gccaggagt	tcaagaccag	cctgggcaac	50460
gtggcaaaac	cccatttcta	caaaaaatat	aaaaattagt	tggacgtggg	ggtgtgtgcc	50520
tgtactcagg	atgctgagg	gggaggatca	cttgagctcg	agaggcagag	gttgcagtga	50580
gctgggatca	caccattgca	atctagcctg	ggtgatagaa	tgagaccttg	tctcaaaaaa	50640
aaaataaata	aataaataaa	ggggaagata	aggattggaa	acagaaggag	cagcatgtgg	50700
acagaaatgt	aggcacaaga	aggcatcact	cactgaagag	actgaaagt	gttactgtg	50760
cctcaagact	ggtggagtgt	gtttccggaa	agataatgat	gaaagagctg	gacagataaa	50820
caggggccaa	atgtaatagg	agtctggatt	ttattctgaa	tatggtaggg	gctattgtag	50880
catcttatat	agggaagtga	aatgagtaca	ttcacattta	aggaatatca	acctgaaaaa	50940
agagtggaga	cattgttggg	ggagagtga	gtagactaga	ggcagggaga	atatttaaat	51000
aattgaggta	agaaatgatg	aacaccagta	taaggtagtg	tctttaaggga	atggagaagg	51060
gaatgaactg	agaaatat	tggaagtaga	atcaacagaa	ctcactgact	gactggatat	51120
ggaggtgaga	aagagaagag	tcaagaatga	tatttctaatt	tctaacttga	gtgactgcat	51180
tcaaagagaa	tacaatatca	ggttccattt	tgtgcatgct	gagtttgaga	tgtgtgggac	51240
atgtacaggg	agctgtccag	taagcaattg	ggtatatcag	ctagccatta	agagagagat	51300
ctttgataga	gaggttggtg	ctgagttgag	ccattggaat	gggcaggatc	actcaagaag	51360
agcttataaa	tgagaagaat	tctaggaata	agtccaaagg	gagaagtaaa	agaagaaact	51420
tgcaaaggac	actgagaaga	aatagctcga	gggatgggag	aaaatccaga	gagagggatg	51480
gcataggagt	cagtgggaagg	aaacggtttc	atgggggtca	gtactactgg	gtagtgaata	51540

taataagaat	atcttttagg	atttctcaac	ccagagatag	gtaagcttag	tataaatgct	51600
tctgtgaagt	aatgaaatga	gaaaccatgc	tgaaatgagc	ttaaagtga	tgggaggtga	51660
agaaacttgg	acagtagaga	cacattttta	gggagtttga	cagtgaagag	aaggaaacta	51720
gaagagggag	aggggtgatag	ataagaaaga	tggtgggtgg	aggggatttg	tttttttggt	51780
tttttgtttt	ttttctgttt	gtatgtttgt	ttgtttttga	gatggagtct	cactttatca	51840
cccaggctgg	agtaaagtgg	tgcaatctca	tctcactgca	acctctgcct	cctagggttca	51900
agtgattctt	ctgcctcaac	ctcctgagta	gttnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	51960
nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	52020
nnnnntgcct	cagcctcccg	aatgctggg	attgcaggag	tgagccccc	gtgcctggcc	52080
tggagggagg	attttgattt	gactttaatg	tgctgtttgc	tgaaggaagc	atgtcaatac	52140
aaataaagaa	gttgaaaaca	taggtaagag	aggttgatta	acccggtagg	tgtttcaagg	52200
gagtttgtgt	gtagggaaag	ggagtgggag	atggaaaggg	gctgggggag	acaggttcta	52260
tccagagact	gttaaaagga	ttagtctttg	attacaagaa	gaactcttct	tatacgtgtt	52320
tgggaagaaa	aaatatgtga	gtagctatgg	ataattttgc	aggaggtggg	cagaatacca	52380
agatattctg	cctggtggcc	tctctactct	tccttgagct	cctgagaaag	gatgtgatct	52440
gagaatgagg	gaggaagtgg	tattggaagc	tggaggagaa	tggagaagat	caaaatgggt	52500
agtctaacia	atgggagaga	actgagatag	acaaaaggat	ttcaggggtg	ttttgagggc	52560
tcagttaagt	ctccttttag	aaggttcagt	tctgtagcct	tggcaagtta	cttaaagtct	52620
ctgtgactat	tacctcatct	ctaagatggg	gactaagctt	ggtgacatag	ttttacatac	52680
caggcacagt	gctgactttt	ttggctctgt	cctgaagtct	tccttttgta	tatggtatgt	52740
ttcggggaat	aggagcctca	agcacttatc	ctttaaatat	ttatcctcca	tcagtcacta	52800
aacgtttact	ctgtactttt	gatagggtgct	gtgggggtcc	agggataaaa	aggtaccttc	52860
aaagttactg	ttaaagtgca	ggaagggttt	taagcaaatt	atgtttaatg	attttgacaa	52920
tctgacatgc	aggaaaatta	atagggccta	tgacagaagag	gagttttatg	taacactctg	52980
tagttcagga	aacagagccc	ttggaagcag	tgatctctct	ggggaggaat	gtctgggtatt	53040
tgggaatctc	atgaaatgat	aatatactta	atttttatca	tgagcagcaa	aacacagatt	53100
tgctaggaga	aagtcacgtg	atgttggtgc	attgggcact	ttagatccca	gggaacagaa	53160
actggctggc	acaggaatgg	gcacactgtg	ggggatggat	catgtagggg	aaggatccct	53220
ggagaagtcc	aggaggtgag	acttccccct	tccttctctc	atgcatgagt	ccacttctct	53280
ctgttgactt	tccccttgte	cctctgggtga	cagcagctgc	ttacctctgg	agacccccct	53340
acatttctga	gagaagggaat	ctggcttgcc	tggtcaattc	ccatgggtcta	tgtttgggca	53400
gaatgtctta	gcaagttgtg	taaagatagt	gtattcatat	attaataata	ataataacat	53460
ctactgaaca	tttgctagggt	gttcagacct	gcactaaccg	tgttacaagt	attatttttt	53520
tgtaatcctt	tccataaacc	tgtgaggtaa	gtactgttat	cacagacaag	gaaaccacaa	53580
tgtggacctg	ttcatgaact	tgtctgaggc	cacgtggctc	tggagttcca	gctcaggtct	53640
gctgactctc	caatcccctg	atattaatat	actggccagt	cactattttg	gctgtatttg	53700
ggtcataatt	atacccttgg	tccagttagc	tatgttgggt	cactttagta	ctgatagcca	53760
gggagatgct	gggcttgata	ggttagtata	attctatgta	ttacctacaa	aaactgtttt	53820
tataaattgt	tttggttaaca	tttgtttgte	acctatttat	tcattttatt	tgcactgggtg	53880
aaaataaact	catcttttaa	aaactgtggg	gaaaatatcc	aaacattgtg	aaaacttgat	53940
taaccttgta	ttttctgtac	acctgggggag	ggatgctggt	atgctgtttc	agcaaaggag	54000
caacttgggc	caatctggga	gacatctgtg	ttttgtggaa	atctgacttg	aaaaccactg	54060
tccagtcact	gcgtgtatta	gcatttaggc	cttgctcttc	tgctatgtat	tattaatgta	54120
gtgtatacat	ttcgagacac	atcatcacat	ttgtcaattt	attgatttct	aggagctgat	54180
ttgtattcta	ggattgtcta	gttggttggt	gctgccataa	aataccacag	tgtgtgtgga	54240
atcaacaacg	gaaatttatt	tctaacagtt	tcagaggcgg	gaaagcctaa	gatcaagggc	54300
caagccagtt	tgattttctag	tgagcgttct	cttctcagct	tgtagacagc	tggtatgtgc	54360
tcacatggtc	ttttcttggt	gcacatgtga	agggggagag	agagagtggg	ctctctgggtg	54420
tctgctctta	caagaacact	gatcctgtca	tgagggtctc	atcctcatga	cctcataacc	54480
ctaattacct	ccagaagcct	catctcctaa	taccatcaca	tgggaggtta	cagcttcaac	54540
atatgaattt	gggtgggggtg	cagctcagtc	cacagcaggt	agtaatgtgc	attttaaaac	54600
ttgtttatac	agtacaagaa	gttacttact	gaagaaggac	aaaaaatagg	aacatttgag	54660
agatttattt	ctggttccat	ggctggagca	actgcacaga	cttttatata	tccaatggag	54720
gtgagtacca	ttgtcaagtc	tgactgtgtg	atgggtgttcg	tgttggttgt	ctattgctct	54780
ctaacaagtt	atcccaaat	taacagttta	aaacaagcat	ttatcatcgc	acagtttctc	54840
tgggtcagga	atctggaagc	agcttagctg	gggtgcctctg	gctcaggggt	tttcacagcc	54900

cacagtcaag	atggtagtca	gagcttggaa	tcagctggag	gcggattcca	agctcactca	54960
tgttgctgcc	aggcctcact	ggctattggc	tggaaacatc	agttcccttat	cacgtgagcc	55020
tttctgtagg	ctgcctgagt	atcctcaaaa	cacagtagct	ggcttcccta	gagtcagtg	55080
tccaacagag	agagagagag	agagtgccta	agatgaaagc	tggatatctt	tgcctcttct	55140
gctgtattcc	attgatcaca	cagaccaacc	ctggtagagt	gtaggagggg	ctggtataat	55200
ggtgttaata	accggagaca	aatatcactg	ggggtcactt	tagaggctgg	ctgccacttt	55260
agaggctggc	tgccattcct	gtccaaagag	tttctgtacc	ataaatttaa	taatggaatc	55320
tcaggatttg	attatatggt	gattatccta	attagacatc	ctttcattag	tgcataggtt	55380
ggcaaaacac	agacctacgg	actgtttcat	acagcccttg	acctaagaat	gcctttttaca	55440
tttttaaaaa	gtgggcaaca	caggaaaaag	tgagaaagat	ctaaaatcga	caccctaaga	55500
tcacaattaa	aagaactaga	gaagcaagag	caaacaaatt	caaaagatag	cggaagacaa	55560
gaagtagcta	aggtcagagc	agaactgaag	gagatagaga	cacgaaaaac	ccttccaaaa	55620
atcattgaat	ccaggagctg	tttttatgaa	aagtttaaca	aaatagacaa	ctagccagaa	55680
taataaagaa	gaaaccagag	gagaatcaaa	tagccccaat	aaaaaatgat	aaaggggata	55740
tcaccaccaa	ttccacagaa	atacaaacta	ccatcagggg	atactataaa	cacctctatg	55800
caaataaact	agaaaatcta	gaagaaatgg	ataaattcct	ggacacatac	acgctcccaa	55860
gactaaatca	ggaagaagct	gaatccctgt	atagaccaat	aacatgttct	gaaattgagg	55920
cagtaattaa	tagcctacca	acaaaaaaa	accaggacc	agacagattc	atagccgaat	55980
tctaccagag	gtacaaagag	gagctgatgc	cattccttct	gaaattattc	aaacaataga	56040
aaaagagaga	ttcctcccta	actcatttta	tgagggcagc	atcattctga	tactaaaacc	56100
tggcagagac	acaacaaaa	tagaaaattt	caggccaata	tccttgatga	acatcaatgt	56160
gaaaatcctc	aataaaatac	tggcaaactg	aatgcagcag	gacatccaaa	agtttatcca	56220
ccatgatcaa	gttggttca	tcctgggat	gcaaggctgt	tcaacatatg	caaatcaata	56280
taacggaatt	catcaataaa	cagaaccagt	gacaaaaacc	gcatgattat	ctcaatagat	56340
gcagaaaagg	ccttcgataa	aattcaacac	cacttcatgt	taaaaactct	cactaaacta	56400
gttattgatg	gaatgtataa	caaaataata	agagctgttt	atgacaaaacc	cacagccaat	56460
atcatactga	atgggcaaaa	gctggaagca	ttccctttga	aaaccggcac	aagacaagga	56520
tgtcctctgt	cagcactcct	attcaacgta	gtattggaag	ttctggccaa	ggcaatcagg	56580
caggagaaaag	aaataaagcg	tattcagata	ggaaaagagg	aagtcaaatt	gtctctgttt	56640
gcagttgaca	tgattgtata	tttagaaaac	ctccttgtct	cagcccaaaa	tctccttaag	56700
ctgataagca	acttaaagca	aagtctcagg	gtacaaaatc	aatgtgcaaa	aatcactagc	56760
attcctatta	accaataata	cacaaacaga	gagccaaatc	acgagtgaac	ttccatccac	56820
aattgctaca	aagagaataa	aatacctcgg	aatacaactt	acaagggatg	tgaaggacct	56880
gttcaaggag	aactacaaac	cactcctcaa	ggaaataaga	gaggacacaa	acaaatggaa	56940
aaacatttca	tgtcatgga	taggaagaat	caatatcata	tcataggaag	aatcagtggc	57000
catactgccc	aaagtaattt	atagattcaa	tgatatcccc	atcaagctaa	cattgaattt	57060
cttcacagaa	atagaaaaaa	ctaccttaa	tttcatatga	aactaaaaaa	gagcctgtat	57120
agccaagaca	atcctaagca	aatgaacga	agctggaggc	atcacgctac	ctgacttcaa	57180
acatactaca	aggctacagt	aacccaaaac	gcatgggtact	ggtaccaaac	agatatatag	57240
accaatggaa	cagaacagag	gcctcagaaa	taacaccaca	cgtctacaac	catctgatct	57300
ttgacaaaaa	caagcaatgg	ggaaaggatt	ccttatttta	tgtatgggtg	tgggaaaaact	57360
ggctagccat	atgcagaaaa	ctgaaactgg	cccccttcct	tacaccttat	aaaaaaaaaa	57420
ttaactcaag	atagattaaa	gtcttaaaaa	tagacttaaa	ctataaaatc	cctagaaaaa	57480
aaccgaggca	ataccattca	ggacacaggc	atggacaaaag	acttcatgac	tgaatcacaa	57540
aagcaatggc	aacaaaagcc	aaaattgaca	aatgggatct	aattaaacta	aagatcttct	57600
gcacagcaaa	agaaactatc	atcagagtga	accggcaacc	tacagaatgg	gagaaaaatt	57660
ttgcaatcta	tccatctgac	aaagggtctaa	tatccagaat	ctataaggaa	cttaagcaaa	57720
tttacaagaa	aaaaaaaccc	acccaaaagt	gggtgacgga	tatgaacaga	cacttctcat	57780
aagaagacat	ttatgcagcc	aacaaacgtg	agaaaaggct	catcatccct	ggttgtaga	57840
gaaatgcaaa	tcaaaaacccc	aatggcatalc	catctcacgc	cagttagtta	aaaagtcagg	57900
aaacaacaga	tgttggaaca	tatgtggaga	aataggaatg	cttttacact	gttggtggga	57960
gtgtaaatta	gttcaagcat	tgtggaagac	agtgtggcaa	ttcctcaagg	atctagaacc	58020
agaaataccg	tttgaccag	caatcccatt	gctggttata	tactcaaagg	attatagatt	58080
tttctactat	aaagacacat	gcacacgtat	atttattgca	gcactgttca	caatagcaaa	58140
gacttggaa	caaccccaat	gcccacagt	gatagactag	ataaacaaaa	tatggcacat	58200
atacaccatg	gaatactatg	cagccataaa	caaggatgag	ttcatgtcct	ttgtagggac	58260

atggatgaag	ctggaagcca	tcattctcag	caacctaa	caggaacaga	aaaccaaa	58320
ccacatgttc	tcactcataa	gttggagttg	aacaatgaga	atacatggac	acagggagg	58380
gaacatcaca	cactggggcc	tttttgggga	tgaggggcta	ggggagggaat	agcattagaa	58440
gaaataccta	atgtaggtga	cagggttgatg	ggtgcagcaa	accaccatgg	cacgtgtata	58500
cctatgtaac	aaacctgcac	gttctgcaca	tgtatcccag	aacttaaagt	acaattttta	58560
aaaagtaggc	aaaaacaaaa	gaaaagaaaa	gtaatatata	accgagacct	aatatttttag	58620
gcttgcaacg	acagatatatt	tactattttag	tctttacagg	aaaagttttc	caactactgc	58680
tttatagcaa	aaataatatt	gtagatgtgg	aattttattga	tatagcagag	gggttttttag	58740
taactgatga	cttaagcaag	ataaatataa	ttttcaccga	tatgtggtat	gcatgctaata	58800
acagcttttt	ttaagcatct	taatatgatt	gtttatatta	ctccacacac	ctctcaaaaa	58860
aacttaatac	cctattttttc	ctctcatatc	ctcccatatc	agttaatagt	atcaccttcc	58920
caactcccca	ctgccccatc	ctgtgttcca	agctagaagt	attgggggta	tcctttatac	58980
taccatttcc	ctcaccttcc	agatgcaggt	ggtcaccagt	cagttttgtt	aagacatcaa	59040
tagattatct	tgcttccatt	tccttgggtca	cttccttcat	cagatcctcc	ttgcagtaaa	59100
cggtgtctct	tggttttggg	cttagccccc	caatagaggt	aatacatgaa	agagaatgta	59160
tcaacaaatt	gtacagtctt	ttgagtgcac	atatgtgcta	ggtattttgtt	ccatgtaaaa	59220
ttacttcatt	tgaatcccat	gatgatagag	ttaatatgaa	caatcatatt	ttgtttttttt	59280
ttatatccag	gttatgaaaa	ccaggctggc	tgtaggcaaa	actgggcagt	actctggaat	59340
atatgattgt	gccagaaga	ttttgaaaca	tgaaggcttg	ggagcttttt	acaaaggcta	59400
tgttcccaat	ttattaggta	tcatacctta	tgacggcata	gatcttgctg	tgtaggaggt	59460
gagtttgtag	aaatcttttg	aattggaaaa	tgacgttaga	tcttggttaga	attggacttt	59520
atatgaagaa	gtagatatat	accagaaaac	agtgtgtgac	cagaagtaaa	ttcaagcatg	59580
tgttatttga	actttcaagt	aacttgagtg	tgaatatgca	tgggggcact	tttgatttag	59640
attttcttgg	gaattgcttt	tgtaaatgaa	gagtagactc	aaagtttaggt	atagttgttc	59700
accttaaaag	gtgtttctag	agattttttc	ctttgttttg	gatttgcaaa	aatctgacat	59760
taagccaagt	gactaatgtg	actaacatga	gtaatacagt	ttcattcctt	gtacggaaga	59820
atacaaatct	tgatcaacc	ctgcaatcta	aatcatttaa	taatttatga	atctcacaaa	59880
caattattga	gcacacacta	tacaaaccac	taggttagac	actggatctg	gggattcaaa	59940
ggactcaatg	tgtgccttga	agaaactgaa	ggtctggtgg	gggagacaaa	cgactaaaa	60000
tcagcgtggg	tatctgtgct	gcgacagaca	tgagccaggg	tgcatgttag	gatgagacct	60060
aagctacagc	gtagagggaag	agtgggaatgt	gtaatgaaaa	gaagagtcga	attttttttt	60120
taaagagctt	tattgagatt	tagttcatat	tccttacatt	tcactcattt	gaagtgtaca	60180
agcaaatggg	ttttggcttc	ttacataaatt	tttaaaaaatt	attataaaaat	ataaaaatttg	60240
ccattttact	aattttaagt	gtacaattca	gtggcattaa	ttacattcac	aatattgtgc	60300
aaccatcaac	actattttcca	aatccttttc	ctcactccaa	acagaaacac	cttaaccttt	60360
aagcaataac	ttcctaccct	ccgtaactca	aacctttggg	aacctctaata	ctgcttttcta	60420
tgtctaggaa	tttaccatt	caagatatct	tataagtaga	atcatacagt	atttttcttt	60480
ttgtgtctga	tttattactc	ttagcataat	gtctctaagg	tttgttcatg	ttgtagcatg	60540
tatcagaact	tcatttcttt	tcattggctga	gtaatatcc	gttatgtgta	tataccacat	60600
tttgtttagt	ccttcatctg	ttgaagagca	tttggttat	ttctactttt	ccaacattgt	60660
gaataatgct	gcagtgaaca	ttggcatctg	cgatctgtt	cgagtctatg	ccttcaattc	60720
ctttgggtat	atatctcaga	atggaattgc	tgagccatat	ggtcattctg	tgtttagctt	60780
ttaggaaacta	tgagactgtt	ttccatagtg	gctgcactta	cattctcacc	agcaacatac	60840
aaaggttcca	gtttttccac	gtccttatta	acacttaatt	tccatttttaa	aaaagcttat	60900
ttttattatg	gccgtcctct	taggtgtgag	gtggtatggg	tcaggacttt	acttcttggtg	60960
ctgagttttt	taaaaaattg	tgattaaaaa	cacataacat	aaagtttatg	attttaacca	61020
tttttaataa	tatagtacag	taagtgttaa	ctgtttgtgg	tttgttgtgc	aacagatctc	61080
tagaactttt	tcacttctca	aaacttaaac	tctatagtca	ttaaacaaca	gctcccaatt	61140
tccccctcac	cccagcgctg	tgtaacctac	ttctcgttt	tatgagtttg	actacattaa	61200
ataccttgta	taagtgaat	catgtggtat	ttctctttcc	gtgactggct	tatttcatgt	61260
aacatagttt	cctcatgatt	catccatatg	atagcatata	acaggacttt	tttgttttta	61320
aggctgaata	ataatttggt	gggtatatat	atcacatttt	ctttattcat	ctgttgatgg	61380
acatttggtg	tgtttctaca	tcttgactat	tgtgaatagt	gctgcagtga	acatggttgt	61440
gcaaatatct	cttcaagata	ctgttttcag	ttctttttga	catatactca	gaagtgggaat	61500
ttctgggtca	aatggtaatt	ctatttttaa	gtttttgagg	aacctccatg	tcattttcca	61560
tagtaactag	acctttttgt	tttttaacat	ttctatcaat	gtacaccaag	attccaattt	61620

ctccatgtcc	tccccaacac	cattaagtgg	ggtggtggtc	tactactatt	gctgtgttgc	61680
tgtttattcc	tcccttcagt	tctgtaagtg	tttgcttcat	atatttagga	gcttaaatatt	61740
agggtccatat	gaagttataa	tttcttctcg	gtaaagtgac	ccatttatca	ttatgtaatg	61800
tccatctttg	tctcttgtga	cagtttgtgt	cttaaaatct	attttgtctg	atgtaattat	61860
ggccacccct	tttctctttg	ggttcccgtt	tttatggaat	atctttttcc	atcctttcac	61920
tttcagctta	tgtgtgtcct	tagatctaaa	gtgagtctca	tagataaggt	atagttgatt	61980
ctgtatgtgt	tattcactca	gcaatttata	tcttttagtt	aggggattta	atccatttac	62040
atttaaagca	gttactgata	gggaaggact	tactgttgtc	atttggctag	ctaccttttt	62100
atctttgtcc	tgtggctttt	ctgtttttcc	cttctctctt	tcctggcttc	ttctgtgttt	62160
tgttgatttt	tttttttttt	gtagtगतat	gttctgattc	ccttctcatt	tccctttgtg	62220
tgcattctat	agatgctatt	tttgtgggta	ccattgcaac	tacataaagc	atactaaagt	62280
tatagcaact	tatttttaagc	tgtttacaac	ttaacttcag	tggatatataa	aactctattt	62340
ctttacatat	ttcacctcct	ccccacaaac	tttatgtctt	ttgatattgt	atatccttaa	62400
catagattta	tagttacttt	ttatgtcttt	cttcttttaa	ttctgtttta	attttgtttt	62460
tgaattttag	attttcaagt	tatttatata	ccttcattac	aatactatag	gattttataa	62520
tattctaaat	attgaccttt	accatagagt	ttcatatttt	gtggttttgt	gttgctattt	62580
atcatccttt	tgtttctcct	tttagccttt	cttgtagggc	cggctctagt	gtgataagct	62640
gtatcagctt	ttgtttgtca	gggacagctt	taattttctc	ttttttgaag	ggcagttttg	62700
cccatacagt	atttttgttt	ggcagttttt	ttaagtttca	aaacatagaa	tataacattc	62760
catttccttc	taacctgcaa	gatttccatt	gagaaatgca	ctcaatggat	tttttaatcc	62820
attgagataa	ttttttaatc	ctgtaggatt	taaaattttt	agtcttacag	gattaaaaaa	62880
ttaaaaagtt	aaacttggtta	tataacatat	taacatgtat	tttatactta	aagtatctta	62940
tgtttaaaaa	gttgattatc	atatatatatt	tatacagttt	ctcctaatta	ttgccttcta	63000
atgaaataca	gggacctaga	gtaacaggga	taaagtatgg	ccttttgatc	agcacgcctg	63060
gttctgagtc	cttcttaaaa	aaactctggg	cctggtgtgg	tggctcatgc	ctataatctc	63120
agcactttgg	gaggccgagg	cgggcgggac	acctgaggtc	aggagtttga	gatcagcctt	63180
gccagcatgg	tgaaccctcg	tctctactaa	cagtacaaag	attagctggg	cgtggtgggtg	63240
ggtgcctgta	atccaagcta	ctcaggaggc	tgaggcgagaa	gaatcgtttg	aacctgggag	63300
gcagagattg	ggccactgca	ctacagcctg	ggtgacaaga	gcgagactcc	atctcaaaaa	63360
aacaaacaaa	aactccgctg	agatgaattt	ttctcatttc	taaaatcaga	ataatagatt	63420
tatgtaagag	tttctgtaag	gctcaaatga	aatatatgta	acgtgtaaaa	tgagatacaa	63480
ttagtagaat	tatattattt	tattaatact	caccataaga	ggtgttcttt	agatcctgca	63540
gcgtttgctg	cgcagttcac	gtttgttttag	aagaatgtca	gtaaccgggtg	caaacctcat	63600
gtgttccgca	ccccagtggt	cctcccacct	ctccacagag	tcaccgcctc	ctgcagtgcc	63660
tgctgcttct	gcaaatgcgt	ggcctcatcc	tgcagaaacg	gggcttctca	tgaggttgag	63720
aatagctgtg	aaaatgttta	cgttgaagtt	gtagagtctg	ttaattattt	tcttctttat	63780
ttctctggca	gctcttgaag	tcctattggc	tggataattt	tgcaaaagat	tctgtaaacc	63840
ctggagtcac	ggtgttgctg	ggatgcgggtg	ccttatccag	cacctgtggt	cagctggcca	63900
gctacccatt	ggctttgggtg	agaactcgca	tgcaggctca	aggtgaattt	ttgattacag	63960
aaccacaccg	ataaaagtgc	tgcaccagta	atgtgctttt	agaactccaa	gttctactaa	64020
gatgcagact	gtagttttta	gacagtattt	ctcaaccttt	ttttcattat	tgccctccta	64080
aggaatcttt	tcagaaattc	tttttctaaa	tgctccctcg	tcatgaaatt	ttaatgcgac	64140
agaagcattg	catatgtact	gtatgcatac	atatgcctta	tagataaaca	gagtactatt	64200
ttttttgact	gtgttacatg	cacgttttaa	gattataagc	tttagtatct	gatggatttg	64260
ggttcagatc	cttgccctcag	acttcttggg	gttttttaatg	ggaatgaaaa	ttgtacagtg	64320
ttgtaagaat	taccaacaat	ataaataaag	catcttgggt	ttgttaaatt	tttggtaaaat	64380
ggtggttggg	atcatttttt	agtgttgctg	agaccctaca	agttttgagc	tgtgattcct	64440
cctcactgtg	acactgtctc	cattgttggtg	tttgattaca	ctgtaccatc	ctggttgttc	64500
tgccagccca	ttgataactt	ttaccatttg	ctggctttta	ttgctatccc	cactctatta	64560
aagtatgcat	tcaaatgcct	ttcttttctc	tttgatgctt	tccctgggtca	gtcttatcca	64620
ttgttttctt	aagtagtaca	ccttgggcat	ctacagctct	attcccaacc	tcccttccaa	64680
gtgccagcca	cagcaacccc	agccaagcag	tcagtaacta	attggcaaat	actccctgag	64740
ccattgtccc	attctagaca	ctgccagatg	ctaggggtag	agcagtcaac	aagtcagggtg	64800
tggccccgcc	agtgtagagt	agagaagacg	ttatgtccag	caagtaaaca	acctgggttaa	64860
accaactcct	cttttggttag	gggagcacag	agcaaggagc	tataacctaa	cttggggcgt	64920
gcagaatgct	gtcagtgaag	ctgagactgg	aaagatgagt	gggagttagc	tgggcacag	64980

ccagtggagt	gggaacagaa	aacattccag	ttgagggaaa	gcatgtgtga	agacactgag	65040
gcaggcacca	acatggtgta	tttaaggagc	tgagagacag	tcatggctgt	agagaaaaac	65100
acaaagtagt	gaactacacg	tttcttgtgt	attctctcat	ttcaccatca	taaccatctt	65160
ggggatggga	atactaacat	tatccccatt	tttcagatga	gcaactgggg	cagagagaat	65220
ttaagtaact	cccacaagat	tatacctgtg	gtaaatagtg	ggactgaaat	tcagacacat	65280
gcagtctgat	tctaaccctc	ctgtctgcca	gctctgatcc	agaactttgc	atgactgata	65340
cggctgatag	attgtctatg	gctgatagac	tgctatttct	gacctaaaag	tctgatcatt	65400
ttacatctgt	tcagacatct	ttgcagcctt	tcgggtgtcag	ttccaaagtt	gttagtggga	65460
atttcaaagc	ctttaataat	ctagccccac	tttgttcact	ctctgtgtaa	taaccacata	65520
caacaattgg	ctgcatctcc	atagcacatg	gtactcctcc	cgttgtcttg	gttgtgccag	65580
caacactggg	tttcgctttc	tcttctgtct	tgttgagggtc	atttccaagg	cccaggctctt	65640
tgtgcttttt	cccagcttc	ccagagcttc	ttccatactc	cccttacttc	ctgagattta	65700
actgttctct	cttcagcgct	tgtctagtaa	gaaggaggca	gcagcagcac	tgtggggtgg	65760
tggaaagtgt	accagctttg	gagtcagacc	attggatctc	agccctacca	tttctactct	65820
agattttttt	aggacaaatt	tctccatctt	tctaagcctc	caattgctca	cttacaaaat	65880
tgatataaca	tttaccttgc	aagattggta	tggaaaggtaa	ttaaccagct	atttagaaca	65940
tagtaattaa	taaataacta	ttattaccat	cattactata	gttaggacac	tcactgttag	66000
gtgctataca	aagaggatca	taaaagggat	gttgtcttgg	gcttcttggg	ataaatgttg	66060
tccttttact	gtattttaga	atatcattct	gggtcataat	tgtttgttgt	cataataatg	66120
aaacatactt	gaatattaaa	ttaccctctt	tttttatttt	ttagccatgt	tagaagggttc	66180
cccacagctg	aatatgggtg	gcctctttcg	acgaattatt	tccaaagaag	gaataccagg	66240
actttacaga	ggcatcaccc	caaacttcat	gaagggtgctc	cctgctgtag	gcatcagtta	66300
tgtgggttat	gaaaatatga	agcaaaacttt	aggagtaacc	cagaaatgat	gttgcatttt	66360
ttgcttttagc	ctgataattg	aaactttcaa	caatctctgg	agtgactttt	tctcctcgaa	66420
ttgaaacaag	tctatggcaa	aagaagctgc	atttttttca	caaaagggaa	gatggtaaca	66480
atggtcactt	caaacttttg	ggctaaatta	tatgtacaca	gaaatgttca	aaatcatagt	66540
tttaatgtgt	tttgaaaagg	ccacacaatt	atactttatc	ttttcttaat	aatcctgcaa	66600
atctctgccc	tgaatccgaa	atctgaaaat	gtactggctt	gaacaaaatt	tgttttgtgt	66660
gttagagtta	taaatcatta	atctttattt	cgggtgggtt	acgtttatgc	cagttccttt	66720
atatttaaat	ttcttgtttt	atataatttg	aatgtcttta	tagatttctt	taaatttcct	66780
tatagaacca	ttaatagaaa	atcattacat	ttaaaatata	ccttacagca	aaagcatcca	66840
aataagtata	gggtttatgt	ccttattttt	ctttcagctg	aatacgaatg	agcagagtgg	66900
tggaaatttct	gaagggaagt	gatgaaatta	tattttatttc	agtgggcact	tttccatttt	66960
accactgtac	cattattttg	ttcctggagt	tatacactaa	ttttcagtat	attactgtta	67020
aattaccaac	acaaggcaat	ttatttgaaa	gattccggtt	atcctgccat	tgctttgaaa	67080
agcagcagga	aacgaaatcc	tttgacttgt	atcagcttct	gcagagcatc	tttgttttcc	67140
tttgtccttt	gtttcctacc	ttttgaatca	gattccggtt	tagtcaggaa	gacttcttgg	67200
gaccattctt	agtaacctga	aatttctttt	ttaattgcat	gaagtggatt	gatcatgagc	67260
aaatgatgtg	cttatttctc	cctcactgtt	gaatatcttt	gaacttgctg	ttttcaatat	67320
gggcagcaca	aagggtgagag	atacatatta	atagtagtat	gtattactct	tatacattag	67380
atacctatat	ttaaatgaaa	ggcccaattt	gtaaacatat	acattcataat	tctctcttgc	67440
cccaagtttt	aggaacatgt	taggatatag	gagacttaat	ttataataat	gagagcattt	67500
ttttatttta	ctaaagccat	ttttatagtc	aactatcttt	tcttatttgt	gtgattagaa	67560
cttagaaaaa	tatttactag	ttgaagttat	tatcagtttt	taatttagtt	cttaaactca	67620
tttcacttct	aataatttct	gttataaaat	gccagcattt	taatgaaaat	ctaagtatgt	67680
aataggcatt	ttctttattt	gaacctacct	cttttatttt	ctgaaccaa	gagaaagatg	67740
gactgggtgt	tgtgaaacat	ttttaaaaat	gtagtttcat	ttatattagt	tatgtttgat	67800
aatgtctca	gtatttttat	aatatgataa	gcctgggatt	ctacttttag	ggttatttgt	67860
acttttgagt	aatatataaa	gtgacaatat	taaggtagat	gatcagctct	ttctattttt	67920
actcgtaaaa	attatggaaa	tgaataattt	tgctaacaac	tttgaaattt	caaacttctg	67980
gaaaatatga	aaatattcat	tgttcattat	gaattttaa	tgtaagggtat	gaatgtgatt	68040
tgtctgtaca	tcttgtatct	tttccaaaaa	atgattctgt	atcttttggg	aaaaagccga	68100
gagttgaaga	tagtatattt	ctggtagtac	tgaatattta	cttacagttt	ctatcaaaaa	68160
tatatatttg	tttctaaaat	tacttgtttt	ccagttttta	tttttttttag	agaaaattct	68220
taagtctcag	tttcttaatt	gaaaaaaaat	aattataaat	aaagcaaaaa	ttgtatccta	68280
cagcttagct	agcttagatg	tttggcacca	gtttgaaatca	tgcttttttac	agctgggtcc	68340

```

atgtagtctt tccaaacatt ttggcctttc ctgagcagcc cttgtagata ttgtctgtat 68400
gatgcatttt gacacaaggt gatatttttt gtgatatcaa aattccacat ttaccatta 68460
gagttacagc cctgggggttc acagtaccaa gggggaccca gagcctcagg attggccagg 68520
ctcattttgc cgtggagtat cagtttgtct tgaaattgtg ggaaaaaatt ctaagttgaa 68580
ttcactggta agtaattttt taaaatttca taatgcagat tacatccaaa atttgattta 68640
aaaattaaaa cataagactg cagagaaatt ctgcatttca actccaatac tatccagact 68700
tcagaaataa cttatcagtt atttctgtaa gcttcttgct tacctggata cctgacaggt 68760
gagatggctg tagcagacac tggcagttcc ctgcccacac acctgtccct gtccacagct 68820
gcacaaggca gctctgtgtg caattgccag catctgctcc tctgttctca gggaatcttt 68880
gtagaaaaaa tgctgccata tttgtttctc acctattagt cttgtctccc agtcaagaga 68940
ataaatttat gcaagcagag attgtacttt acagtatttt gtctttgagc ttggcattag 69000
gttgcathtt taaaaatgtg gcatggcttc ctcatccccc aataggaact ttgccagccc 69060
ttttgttctc atggaacttc cttttttgaa aagagcacca aaggagtaaa aatactgtgg 69120
agggagcaac cctcctttgc catatgctct cattgggaga catgtggagc agtctgaagt 69180
catttaggcc actctctggg agagcacatc ctatgatgtt ctcccagcct agccccttcc 69240
actgtgctca agtccaagct gaccagcttt ctgaccacag tgtaaacaaa gatgattgtc 69300
agtgggcccc agaatectat acccaga 69327

```

<210> 4

<211> 475

<212> PRT

<213> *Oryctolagus cuniculus*

<400> 4

```

Met Leu Arg Trp Leu Arg Gly Phe Val Leu Pro Thr Ala Ala Cys Gln
 1          5          10          15
Gly Ala Glu Pro Thr Arg Tyr Glu Thr Leu Phe Gln Ala Leu Asp
 20          25          30
Arg Asn Gly Asp Gly Val Val Asp Ile Arg Glu Leu Gln Glu Gly Leu
 35          40          45
Lys Ser Leu Gly Ile Pro Leu Gly Gln Asp Ala Glu Glu Lys Ile Phe
 50          55          60
Thr Thr Gly Asp Val Asn Lys Asp Gly Lys Leu Asp Phe Glu Glu Phe
 65          70          75          80
Met Lys Tyr Leu Lys Asp His Glu Lys Lys Met Lys Leu Ala Phe Lys
 85          90          95
Ser Leu Asp Lys Asn Asn Asp Gly Lys Ile Glu Ala Ser Glu Ile Val
100          105          110
Gln Ser Leu Gln Thr Leu Gly Leu Thr Ile Ser Glu Gln Gln Ala Glu
115          120          125
Leu Ile Leu Gln Ser Ile Asp Ala Asp Gly Thr Met Thr Val Asp Trp
130          135          140
Asn Glu Trp Arg Asp Tyr Phe Leu Phe Asn Pro Val Ala Asp Ile Glu
145          150          155          160
Glu Ile Ile Arg Phe Trp Lys His Ser Thr Gly Ile Asp Ile Gly Asp
165          170          175
Ser Leu Thr Ile Pro Asp Glu Phe Thr Glu Glu Glu Arg Lys Ser Gly
180          185          190
Gln Trp Trp Arg Gln Leu Leu Ala Gly Gly Ile Ala Gly Ala Val Ser
195          200          205
Arg Thr Ser Thr Ala Pro Leu Asp Arg Leu Lys Val Met Met Gln Val
210          215          220
His Gly Ser Lys Ser Met Asn Ile Phe Gly Gly Phe Arg Gln Met Ile
225          230          235          240
Lys Glu Gly Gly Val Arg Ser Leu Trp Arg Gly Asn Gly Thr Asn Val
245          250          255

```


Ile	Lys	Ile	Ala	Pro	Glu	Thr	Ala	Val	Lys	Phe	Trp	Val	Tyr	Glu	Gln
			260					265					270		
Tyr	Lys	Lys	Leu	Leu	Thr	Glu	Glu	Gly	Gln	Lys	Ile	Gly	Thr	Phe	Glu
			275					280					285		
Arg	Phe	Ile	Ser	Gly	Ser	Met	Ala	Gly	Ala	Thr	Ala	Gln	Thr	Phe	Ile
			290					295					300		
Tyr	Pro	Met	Glu	Val	Met	Lys	Thr	Arg	Leu	Ala	Val	Gly	Lys	Thr	Gly
305						310					315				320
Gln	Tyr	Ser	Gly	Ile	Tyr	Asp	Cys	Ala	Lys	Lys	Ile	Leu	Lys	Tyr	Glu
				325						330					335
Gly	Phe	Gly	Ala	Phe	Tyr	Lys	Gly	Tyr	Val	Pro	Asn	Leu	Leu	Gly	Ile
			340						345					350	
Ile	Pro	Tyr	Ala	Gly	Ile	Asp	Leu	Ala	Val	Tyr	Glu	Leu	Leu	Lys	Ser
			355					360						365	
His	Trp	Leu	Asp	Asn	Phe	Ala	Lys	Asp	Ser	Val	Asn	Pro	Gly	Val	Leu
			370					375					380		
Val	Leu	Leu	Gly	Cys	Gly	Ala	Leu	Ser	Ser	Thr	Cys	Gly	Gln	Leu	Ala
385						390					395				400
Ser	Tyr	Pro	Leu	Ala	Leu	Val	Arg	Thr	Arg	Met	Gln	Ala	Gln	Ala	Met
				405						410					415
Leu	Glu	Gly	Ala	Pro	Gln	Leu	Asn	Met	Val	Gly	Leu	Phe	Arg	Arg	Ile
			420							425				430	
Ile	Ser	Lys	Glu	Gly	Leu	Pro	Gly	Leu	Tyr	Arg	Gly	Ile	Thr	Pro	Asn
			435					440						445	
Phe	Met	Lys	Val	Leu	Pro	Ala	Val	Gly	Ile	Ser	Tyr	Val	Val	Tyr	Glu
			450					455						460	
Asn	Met	Lys	Gln	Thr	Leu	Gly	Val	Thr	Gln	Lys					
465						470					475				

<210> 5
 <211> 410
 <212> PRT
 <213> Homo sapiens

<400> 5															
Phe	Val	Leu	Pro	Thr	Ala	Ala	Cys	Gln	Asp	Ala	Glu	Gln	Pro	Thr	Arg
1				5					10					15	
Tyr	Glu	Thr	Leu	Phe	Gln	Ala	Leu	Asp	Arg	Asn	Gly	Asp	Gly	Val	Val
			20					25					30		
Asp	Ile	Gly	Glu	Leu	Gln	Glu	Gly	Leu	Arg	Asn	Leu	Gly	Ile	Pro	Leu
			35				40						45		
Gly	Gln	Asp	Ala	Glu	Glu	Lys	Ile	Phe	Thr	Thr	Gly	Asp	Val	Asn	Lys
			50				55					60			
Asp	Gly	Lys	Leu	Asp	Phe	Glu	Glu	Phe	Met	Lys	Tyr	Leu	Lys	Asp	His
65					70					75					80
Glu	Lys	Lys	Met	Lys	Leu	Ala	Phe	Lys	Ser	Leu	Asp	Lys	Asn	Asn	Asp
			85						90					95	
Gly	Lys	Ile	Glu	Ala	Ser	Glu	Ile	Val	Gln	Ser	Leu	Gln	Thr	Leu	Gly
			100					105					110		
Leu	Thr	Ile	Ser	Glu	Gln	Gln	Ala	Glu	Leu	Ile	Leu	Gln	Ser	Ile	Asp
			115					120					125		
Val	Asp	Gly	Thr	Met	Thr	Val	Asp	Trp	Asn	Glu	Trp	Arg	Asp	Tyr	Phe
			130				135					140			
Leu	Phe	Asn	Pro	Val	Thr	Asp	Ile	Glu	Glu	Ile	Ile	Arg	Phe	Trp	Lys
145						150					155				160

His	Ser	Thr	Gly	Ile	Asp	Ile	Gly	Asp	Ser	Leu	Thr	Ile	Pro	Asp	Glu	
				165					170					175		
Phe	Thr	Glu	Asp	Glu	Lys	Lys	Ser	Gly	Gln	Trp	Trp	Arg	Gln	Leu	Leu	
			180					185					190			
Ala	Gly	Gly	Ile	Ala	Gly	Ala	Val	Ser	Arg	Thr	Ser	Thr	Ala	Pro	Leu	
			195				200					205				
Asp	Arg	Leu	Lys	Ile	Met	Met	Gln	Val	His	Gly	Ser	Lys	Ser	Asp	Lys	
	210					215					220					
Met	Asn	Ile	Phe	Gly	Gly	Phe	Arg	Gln	Met	Val	Lys	Glu	Gly	Gly	Ile	
225					230					235					240	
Arg	Ser	Leu	Trp	Arg	Gly	Asn	Gly	Thr	Asn	Val	Ile	Lys	Ile	Ala	Pro	
				245					250					255		
Glu	Thr	Ala	Val	Lys	Phe	Trp	Ala	Tyr	Glu	Gln	Tyr	Lys	Lys	Leu	Leu	
			260					265					270			
Thr	Glu	Glu	Gly	Gln	Lys	Ile	Gly	Thr	Phe	Glu	Arg	Phe	Ile	Ser	Gly	
			275				280					285				
Ser	Met	Ala	Gly	Ala	Thr	Ala	Gln	Thr	Phe	Ile	Tyr	Pro	Met	Glu	Val	
	290					295					300					
Met	Lys	Thr	Arg	Leu	Ala	Val	Gly	Lys	Thr	Gly	Gln	Tyr	Ser	Gly	Ile	
305					310					315					320	
Tyr	Asp	Cys	Ala	Lys	Lys	Ile	Leu	Lys	His	Glu	Gly	Leu	Gly	Ala	Phe	
				325					330					335		
Tyr	Lys	Gly	Tyr	Val	Pro	Asn	Leu	Leu	Gly	Ile	Ile	Pro	Tyr	Ala	Gly	
			340					345					350			
Ile	Asp	Leu	Ala	Val	Tyr	Glu	Leu	Leu	Lys	Ser	Tyr	Trp	Leu	Asp	Asn	
		355					360					365				
Phe	Ala	Lys	Asp	Ser	Val	Asn	Pro	Gly	Val	Met	Val	Leu	Leu	Gly	Cys	
	370					375					380					
Gly	Ala	Leu	Ser	Ser	Thr	Cys	Gly	Gln	Leu	Ala	Ser	Tyr	Pro	Leu	Ala	
385					390					395					400	
Leu	Val	Arg	Thr	Arg	Met	Gln	Ala	Gln	Ala							
				405				410								

<210> 6
 <211> 342
 <212> PRT
 <213> Homo sapiens

<400> 6

Phe	Gln	Ala	Leu	Asp	Arg	Asn	Gly	Asp	Gly	Val	Val	Asp	Ile	Gly	Glu	
1				5					10					15		
Leu	Gln	Glu	Gly	Leu	Arg	Asn	Leu	Gly	Ile	Pro	Leu	Gly	Gln	Asp	Ala	
			20					25					30			
Glu	Glu	Lys	Ile	Phe	Thr	Thr	Gly	Asp	Val	Asn	Lys	Asp	Gly	Lys	Leu	
		35					40					45				
Asp	Phe	Glu	Glu	Phe	Met	Lys	Tyr	Leu	Lys	Asp	His	Glu	Lys	Lys	Met	
	50					55					60					
Lys	Leu	Ala	Phe	Lys	Ser	Leu	Asp	Lys	Asn	Asn	Asp	Gly	Lys	Ile	Glu	
65					70					75					80	
Ala	Ser	Glu	Ile	Val	Gln	Ser	Leu	Gln	Thr	Leu	Gly	Leu	Thr	Ile	Ser	
				85					90					95		
Glu	Gln	Gln	Ala	Glu	Leu	Ile	Leu	Gln	Ser	Ile	Asp	Val	Asp	Gly	Thr	
			100					105					110			
Met	Thr	Val	Asp	Trp	Asn	Glu	Trp	Arg	Asp	Tyr	Phe	Leu	Phe	Asn	Pro	
		115					120						125			

Val	Thr	Asp	Ile	Glu	Glu	Ile	Ile	Arg	Phe	Trp	Lys	His	Ser	Thr	Gly
130						135					140				
Ile	Asp	Ile	Gly	Asp	Ser	Leu	Thr	Ile	Pro	Asp	Glu	Phe	Thr	Glu	Asp
145					150					155					160
Glu	Lys	Lys	Ser	Gly	Gln	Trp	Trp	Arg	Gln	Leu	Leu	Ala	Gly	Gly	Ile
				165					170						175
Ala	Gly	Ala	Val	Ser	Arg	Thr	Ser	Thr	Ala	Pro	Leu	Asp	Arg	Leu	Lys
			180					185					190		
Ile	Met	Met	Gln	Val	His	Gly	Ser	Lys	Ser	Asp	Lys	Met	Asn	Ile	Phe
	195						200					205			
Gly	Gly	Phe	Arg	Gln	Met	Val	Lys	Glu	Gly	Gly	Ile	Arg	Ser	Leu	Trp
	210					215					220				
Arg	Gly	Asn	Gly	Thr	Asn	Val	Ile	Lys	Ile	Ala	Pro	Glu	Thr	Ala	Val
225					230					235					240
Lys	Phe	Trp	Ala	Tyr	Glu	Gln	Tyr	Lys	Lys	Leu	Leu	Thr	Glu	Glu	Gly
				245					250						255
Gln	Lys	Ile	Gly	Thr	Phe	Glu	Arg	Phe	Ile	Ser	Gly	Ser	Met	Ala	Gly
			260					265					270		
Ala	Thr	Ala	Gln	Thr	Phe	Ile	Tyr	Pro	Met	Glu	Val	Met	Lys	Thr	Arg
		275					280					285			
Leu	Ala	Val	Gly	Lys	Thr	Gly	Gln	Tyr	Ser	Gly	Ile	Tyr	Asp	Cys	Ala
	290					295					300				
Lys	Lys	Ile	Leu	Lys	His	Glu	Gly	Leu	Gly	Ala	Phe	Tyr	Lys	Gly	Tyr
305					310					315					320
Val	Pro	Asn	Leu	Leu	Gly	Ile	Ile	Pro	Tyr	Ala	Gly	Ile	Asp	Leu	Ala
			325						330					335	
Val	Tyr	Glu	Leu	Leu	Lys										
			340												

<210> 7
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 7
 Asn Gly Thr Asn
 1

<210> 8
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 8
 Thr Arg Tyr Glu
 1

<210> 9
 <211> 4
 <212> PRT
 <213> Homo sapiens

<400> 9

Thr Thr Gly Asp
1

<210> 10
<211> 4
<212> PRT
<213> Homo sapiens

<400> 10
Thr Ile Ser Glu
1

<210> 11
<211> 4
<212> PRT
<213> Homo sapiens

<400> 11
Thr Asp Ile Glu
1

<210> 12
<211> 4
<212> PRT
<213> Homo sapiens

<400> 12
Thr Gly Ile Asp
1

<210> 13
<211> 4
<212> PRT
<213> Homo sapiens

<400> 13
Thr Ile Pro Asp
1

<210> 14
<211> 4
<212> PRT
<213> Homo sapiens

<400> 14
Thr Glu Asp Glu
1

<210> 15
<211> 4

<212> PRT
 <213> Homo sapiens

 <400> 15
 Ser Lys Ser Asp
 1

<210> 16
 <211> 6
 <212> PRT
 <213> Homo sapiens

 <400> 16
 Gly Ile Pro Leu Gly Gln
 1 5

<210> 17
 <211> 6
 <212> PRT
 <213> Homo sapiens

 <400> 17
 Gly Leu Thr Ile Ser Glu
 1 5

<210> 18
 <211> 6
 <212> PRT
 <213> Homo sapiens

 <400> 18
 Gly Ile Asp Ile Gly Asp
 1 5

<210> 19
 <211> 6
 <212> PRT
 <213> Homo sapiens

 <400> 19
 Gly Gly Ile Ala Gly Ala
 1 5

<210> 20
 <211> 6
 <212> PRT
 <213> Homo sapiens

 <400> 20
 Gly Ile Ala Gly Ala Val
 1 5

<210> 21
<211> 6
<212> PRT
<213> Homo sapiens

<400> 21
Gly Gly Ile Arg Ser Leu
1 5

<210> 22
<211> 6
<212> PRT
<213> Homo sapiens

<400> 22
Gly Asn Gly Thr Asn Val
1 5

<210> 23
<211> 6
<212> PRT
<213> Homo sapiens

<400> 23
Gly Gln Lys Ile Gly Thr
1 5

<210> 24
<211> 6
<212> PRT
<213> Homo sapiens

<400> 24
Gly Ser Met Ala Gly Ala
1 5

<210> 25
<211> 6
<212> PRT
<213> Homo sapiens

<400> 25
Gly Gln Tyr Ser Gly Ile
1 5

<210> 26
<211> 6
<212> PRT
<213> Homo sapiens

<400> 26
Gly Ile Tyr Asp Cys Ala
1 5

<210> 27
<211> 6
<212> PRT
<213> Homo sapiens

<400> 27
Gly Ile Asp Leu Ala Val
1 5

<210> 28
<211> 6
<212> PRT
<213> Homo sapiens

<400> 28
Gly Ala Leu Ser Ser Thr
1 5

<210> 29
<211> 6
<212> PRT
<213> Homo sapiens

<400> 29
Gly Gln Leu Ala Ser Tyr
1 5

<210> 30
<211> 6
<212> PRT
<213> Homo sapiens

<400> 30
Gly Leu Tyr Arg Gly Ile
1 5

<210> 31
<211> 6
<212> PRT
<213> Homo sapiens

<400> 31
Gly Ile Thr Pro Asn Phe
1 5

<210> 32
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 32
 Asp Arg Asn Gly Asp Gly Val Val Asp Ile Gly Glu Leu
 1 5 10

<210> 33
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 33
 Asp Val Asn Lys Asp Gly Lys Leu Asp Phe Glu Glu Phe
 1 5 10

<210> 34
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 34
 Asp Lys Asn Asn Asp Gly Lys Ile Glu Ala Ser Glu Ile
 1 5 10

<210> 35
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 35
 ttgcccacgc agatggctgt tgatcttttc tgcaacaaat ccaggagttt ctcctttttg 60
 ttttataatt gctccaatag atgcttttagg atttaactct ctgcttttta aagcagaatc 120
 gccatcccag gtgtgcaacc acgaaaaaat tagacatccg tgagagacaa tgccctccat 180
 ggcccagttt ccaggcagag agaagcagct ctgggctgac cgccaaggct ccggcccag 240
 aggggtcttta agtggagtaa ccagtcttca agaccccgt cccaagccac cgacgcgctg 300
 vcgctgcagc cctggacctg ctgggggcct ctctctcgga cccgcatgct gacagcggga 360
 ctggcaactg ggcagaggct gaccccggtt ccgcacagca cctcccgaga cccagctccc 420
 agtccctca ctccggctc tctggaggcg ggcccggcca gtgccgccga ggccagcgcg 480
 gcgagctcct ccccagcagc ggcgggacgg ccacaccctg cgcgccgcgc gggctcgggt 540
 ggggtctccg ctctgcgcc ctgcgcgccg cagccgcacc cccgacggcg ccccaaacgc 600
 t 601

<210> 36
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 36
 agtttctcct ttttgtttta taattgctcc aatagatgct ttaggattta actctctgct 60
 ttttaaagca gaatcgccat cccagggtgtg caaccacgaa aaaattagac atccgtgaga 120

gacaatgccc	tccatggccc	agtttccagg	cagagagaag	cagctctggg	ctgaccgcca	180
aggctccggc	ccgagagggg	ctttaagtgg	agtaaccagt	cttcaagacc	ccgctcccaa	240
gccaccgacg	cgctgacgct	gcagccctgg	acctgctggg	ggcctcttcc	tgggacccgc	300
vtgctgacag	cgggactggc	aactgggcag	aggtcgaccc	cgggtcgcga	cagcacctcc	360
cgagaccag	ctcccagctc	cctcacttcc	ggctctctgg	aggcgggccc	ggccagtgcc	420
gccgaggcca	gcgcggcgag	ctcctcccca	gcagcggcgg	gacggccaca	ccctgcgcgc	480
cgcgcgggct	cggggtgggt	ctccgctcct	gcgccctgcg	cgccgcagcc	gcacccccga	540
cggcgcccca	aacgctgttg	cgccgcgcgc	cccgcccagc	ccggcctcgc	gctgggtccc	600
g						601

<210> 37
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 37						
tgcccatccc	aggtgtgcaa	ccacgaaaaa	attagacatc	cgtgagagac	aatgccctcc	60
atggcccagt	ttccaggcag	agagaagcag	ctctgggctg	accgccaagg	ctccggcccc	120
agaggggtctt	taagtggagt	aaccagtctt	caagaccccc	ctcccaagcc	accgacgcgc	180
tgacgctgca	gccctggacc	tgtctggggc	ctcttctctg	gacccgcatg	ctgacagcgg	240
gactggcaac	tgggcagagg	tcgaccccg	gtccgcacag	cacctcccga	gacccagctc	300
scagctccct	cacttccggc	tctctggagg	cgggcccggc	cagtgccgcc	gaggccagcg	360
cggcgagctc	ctccccagca	gcggcgggac	ggccacaccc	tgcgcgccgc	gcgggctcgg	420
gtgggggtctc	cgctcctgcg	ccctgcgcgc	cgcagccgca	cccccgacgg	cgccccaaac	480
gctgttgcg	cgcgcgcccc	gcccagcccc	gcctcgcgct	ggccccggtc	tcgccccgca	540
gccctcgatc	tcccgtagct	tctctggcca	ggccgcctgc	gcctctggga	ccatgttgcg	600
c						601

<210> 38
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 38						
caaccacgaa	aaaattagac	atccgtgaga	gacaatgccc	tccatggccc	agtttccagg	60
cagagagaag	cagctctggg	ctgaccgcca	aggctccggc	ccgagagggg	ctttaagtgg	120
agtaaccagt	cttcaagacc	ccgctcccaa	gccaccgacg	cgctgacgct	gcagccctgg	180
acctgctggg	ggcctcttcc	tgggacccgc	atgctgacag	cgggactggc	aactgggcag	240
aggtcgaccc	cgggtcgcga	cagcacctcc	cgagaccag	ctcccagctc	cctcacttcc	300
kgctctcttg	aggcgggccc	ggccagtgcc	gccgagggcca	gcgcggcgag	ctcctcccca	360
gcagcggcgg	gacggccaca	ccctgcgcgc	cgcgcgggct	cggggtgggg	ctccgctcct	420
gcgccctgcg	cgccgcagcc	gcacccccga	cggcgccccca	aacgctgttg	cgccgcgcgc	480
cccgcccagc	ccggcctcgc	gctgggtccc	gtctcgcccc	gcagccctcg	atctcccgtg	540
acttctctcg	ccaggccgc	tgcgcctctg	ggaccatgtt	gcgctggctg	cgggacttctg	600
t						601

<210> 39
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 39						
caaggctccg	gcccagagagg	gtctttaagt	ggagtaacca	gtcttcaaga	ccccgctccc	60
aagccaccga	cgcgctgacg	ctgcagccct	ggacctgctg	ggggcctctt	cctcggaccc	120
gcatgctgac	agcgggactg	gcaactgggc	agaggtcgac	cccgggtccg	cacagcacct	180
cccagagacc	agctcccagc	tccctcactt	ccggctctct	ggaggcgggc	ccggccagtg	240

```

ccgccgaggc cagcgcgggc agctcctccc cagcagcggc gggacggcca caccctgcgc 300
kccgcgcggg ctcggttggg gtctccgctc ctgcgccctg cgcgccgcag ccgcaccccc 360
gacggcgccc caaacgctgt tgcgcgcgc gcccgccca gccggcctc gcgctggtcc 420
cggctctgcc ccgcagccct cgatctccc tgacttcctc ggccaggccg cctgcgcctc 480
tgggaccatg ttgcgctggc tgcgggactt cgtgctgccc accgcggcct gccaggacgc 540
ggagcagccg acgcgctacg agaccctctt ccaggcactg gaccgcaatg gggacggagt 600
g 601

```

```

<210> 40
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 40
gccaccgacg cgctgacgct gcagccctgg acctgctggg ggctcttcc tcggacccgc 60
atgctgacag cgggactggc aactgggcag aggtcgaccc cgggtccgca cagcacctcc 120
cgagaccag ctccagctc cctcacttcc ggctctctgg aggcggggccc ggccagtgcc 180
gccgaggcca gcgcggcgag ctctcccca gcagcggcgg gacggccaca ccctgcgcgc 240
cgcgcgggct cgggtggggc ctccgctcct gcgccctgcg cgccgcagcc gcacccccga 300
mggcgcccca aacgctgttg cgcgcgcgc cccgcccagc ccggcctcgc gctggtcccc 360
gtctcgcccc gcagccctcg atctcccggt acttcctcgg ccaggccgcc tgcgcctctg 420
ggaccatggt gcgctggctg cgggacttcg tgctgcccac cgcggcctgc caggacgcgg 480
agcagccgac gcgctacgag accctcttcc aggcactgga ccgcaatggg gacggagtgg 540
tggacatcgg cgagctgcag gaggggctca ggaacctggg catccctctg ggccaggacg 600
c 601

```

```

<210> 41
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 41
tggggccgcg accggcgacc ccggtaacag aagtgggtca taatacgaaa gtctactggt 60
atgtgtccag ataaaatgag tgttgtggac actctggccc acgggcactg ttaaattttt 120
aagacacttt tgtcctgaat ccatcccagg ttctttgttt tctgttttaa taccttgacg 180
acatgtaatc cgtttttagt gtcagacttc agtgggtccc aagttttgta taaaggcgca 240
cacattcgat ctctttcgaa gctgctttgt tacagcagct atgtgtattg tctactgttt 300
saaaactggt tgaaaaccaa tcgcgtgttt cccccacttc ctgttgagaa ggaatggcgg 360
cattccattg tttaagacat tctagggtta atgccctagg tacataaatt gatctgaagg 420
gttgacttga cctgcgactg agcaatttca ttttctctga gtcattctaa ctgtgcccct 480
gaacttctgc cccttttagta ggggtggagat atgtggaaact tctccaaccc tgttgaagcg 540
ttccctgaca ctggcattct cttatccaaa gagggaaaagt gattagggtta ctatgagggc 600
c 601

```

```

<210> 42
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 42
gctgattgtc ccagaaatgg cccagttgga gttccccacc atgtccaatc attggctgga 60
agcagcccag gaaagggacg accttgctgc agtgcacag cagatgccag ggtagaggc 120
tagagagtgg aagtcaactg tgttcctcac agtaggtgcc tttgaaggga gatctcagtg 180
gtacaactcc atggctccca caatatacaa aagctctttg gagtgctcaa tgatttttaa 240
gattgtaaag ggatcctgag atcaaaaagc ttgagaattg ctgctgtatc accattttta 300
ygtaactgca tcatattctg ttatatgttt gtgtcatagt atatgttacc aattcttttt 360

```

```

aatcacctt ttactttatt gatagtttaa aaacgattgt aagtgaatt gcaatggatg 420
tcctttgtat tcattttctc attctgggtcc agttactttc gtaggataaa ttttgaggag 480
tggacattgc tgagtctgaa ggtaacacac attttaaact gggatacgtg ttgcctttcg 540
gaaaccttag acccattttc actcttttga ctgacagtgc ttgcttctcc acatcctcgc 600
t 601

```

```

<210> 43
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 43
gaagggagat ctcaagtggta caactccatg gtccctacaa tatacaaaag ctcttttgag 60
tgctcaatga tttttaagat tgtaaaggga tcctgagatc aaaaagcttg agaattgctg 120
ctgtatcacc atttttacgt aactgcatca tattctgtta tatgtttgtg tcatagtata 180
tgttaccaat tctttttaaa tcacctttta ctttattgat agtttaaaaa cgattgtaag 240
tgaaattgca atggatgtcc tttgtattca ttttctcatt ctgggtccagt tactttcgtg 300
rgataaattt tgaggagtgg acattgctga gtctgaagggt aacacacatt ttaaaactggg 360
atacgtattg cctttcggaa accttagacc cattttcact cttttgactg acagtgcctg 420
cttctccaca tcctcgtcga ttcagggtat cagtctttgt aaagtctcct attctgcagg 480
tgaaattcct tttcatttcc tgtcttagtc catttagtgt tgctatagtg gaatatctga 540
gacagggtaa tttataaaga aaagacattt atttagctca cagttccgca ggctgggaag 600
t 601

```

```

<210> 44
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 44
cagttacttt cgtaggataa attttgagga gtggacattg ctgagtctga aggtaacaca 60
cattttaaac tgggatacgt attgcctttc ggaaacctta gacctatttt cactcttttg 120
actgacagtg cttgcttctc cacatcctcg ctcatcagg gtatcagttt ttgtaaagtc 180
tcctattctg cagggtgaaat tccttttcat ttctgtctt agtccattta gtgttgctat 240
agtggaaat ctgagacagg gtaatttata aagaaaagac atttatttag ctcacagttc 300
ygcaggctgg gaagttaaag aagcgtgggt ctggcatctg ctggactcct ggggagggtc 360
ttctgtctgt gtcacaacat ggtggaaagt caaagtggaa gtggacatgt gtgaagaagc 420
aaaatccgag ggggtgtcctg gctttatagc aaccagcct cgagggaact gatccattac 480
tgagggaact aattcagtt catgagagag agaactcact cactactgca agaagacac 540
caagccattc atgagggatc tgccctcgta accctgacac ctctgtctag gtccctcctc 600
c 601

```

```

<210> 45
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 45
catttagtgt tgctatagtg gaatatctga gacagggtaa tttataaaga aaagacattt 60
atttagctca cagttccgca ggctgggaag ttttaagaagc gtggtgctgg catctgctgg 120
actcctgggg agggctttcc tgctgtgtca caacatgggt gaaagtcaaa gtggaagtgg 180
acatgtgtga agaagcaaaa tccgaggggt gtcctggctt tatagcaacc cagcctcgag 240
ggaactgac cattactgag ggaactaatt cagtctcatg agagagagaa ctcactcact 300
rctgcaagaa tgacaccaag ccattcatga gggatctgcc tccgtaaccc tgacacctcc 360
tgctagggtc ctctcccaa cacggccaca tcagggatca gacttcaaca tgagtttttg 420
tggggacaaa caaacgtag cacttgcttt gccttttgggt tctattcaca tcctccacag 480

```

gattgcatta	tgcctaccca	tttgggtgagg	gcagtcttct	ttaattgggt	tactgattca	540
aatgctaccc	tcctccagag	acatcctcac	agacacaccc	agaaatcatg	ttttaccagt	600
t						601

<210> 46
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 46						
ttcctgctgt	gtcacaacat	ggtggaaagt	caaagtggaa	gtggacatgt	gtgaagaagc	60
aaaatccgag	gggtgtcctg	gctttatagc	aaccagcct	cgagggaact	gatccattac	120
tgagggaact	aattcagttc	catgagagag	agaactcact	cactactgca	agaatgacac	180
caagccattc	atgagggatc	tgcctccgta	accctgacac	ctcctgctag	gtccctcctc	240
ccaacacggc	cacatcaggg	atcagacttc	aacatgagtt	tttgtgggga	caaacaaaac	300
rtagcacttg	ctttgccttt	tggttctatt	cacatcctcc	acaggattgc	attatgccta	360
cccatcttgt	gagggcagtc	ttctttaatt	ggtttactga	ttcaaagtct	accctcctcc	420
agagacatcc	tcacagacac	accagaaaat	catgttttac	cagttatctg	ggcatccctt	480
agtccagacg	agttgataca	taaaattaac	catcacacat	gggatagaat	taggattaca	540
cagtcaacct	ttatgggaga	aaatttcaga	ggcatgtcag	gggtttatgt	aatgtcaagg	600
a						601

<210> 47
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 47						
tgttttattgc	attgagtggg	atcaggattt	cactccatta	agtaattcct	ctgttaacaa	60
agagggttca	tttcattttt	atttcattaa	tattgctttt	tttttttttt	ttctggagac	120
agaatccttg	tctatcacca	aggctggagt	gcagtgggtg	gatctcggct	cactgcagcc	180
tctgcttcct	ggattcaagc	gattctttgt	cctcagcctc	ccaagcagct	gagattacag	240
gcacatgcc	ccacacctgg	ttaacttttg	tattttctag	tagagatggg	attttgccat	300
kttggtcagg	ctgggtcttg	attcctggcc	tctagtgatc	tgctgcctc	tgctctgaa	360
agtgtctaaga	ttacaggcat	gagctaccat	ggccagccca	tttccttaat	attttaattg	420
tcagacatgt	tatggtttct	ggcacaatat	taagaagaca	tgatatgaaa	tcacagggtg	480
aatttttaggg	catcacacaa	gaaagattat	ggtataagaa	aaacaatgga	attccaacta	540
catttctgtc	aaatgttcta	aaatatataa	aatctgtatc	ttttgtgttc	tctcctgatt	600
t						601

<210> 48
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 48						
ttatttcatt	aatattgctt	tttttttttt	ttttctggag	acagaatcct	gctctatcac	60
caaggctgga	gtgcagtggg	gcgatctcgg	ctcactgcag	cctctgcttc	ctggattcaa	120
gcgattcttg	tgcttcagcc	tccaagcag	ctgagattac	aggcacatgc	caccacacct	180
gggttaacttt	tgtattttct	agtagagatg	ggattttgcc	atgttggtca	ggctgggtctt	240
gaattcctgg	cctctagtga	tctgcctgcc	tctgcctctg	aaagtgctaa	gattacaggc	300
dtgagctacc	atggccagcc	catttcctta	atattttaat	tgtagacat	gttatggttt	360
ctggcacaat	attaagaaga	catgatatga	aatcacaggg	tgaatttttag	ggcatcacaa	420
cagaaagatt	atgggtataag	aaaaacaatg	gaattccaac	tacattttctg	tcaaatgttc	480
taaaatatat	aaaatctgta	tcttttgtgt	tctctcctga	tttatattct	aaatttgatg	540
ttatccttct	ctgcagaaat	aaagtgtctg	aaagaatgaa	aaaaatggaa	gaattcttta	600

g

601

<210> 49
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 49
 atgaaatcac aggggtgaatt ttagggcatc acaacagaaa gattatggta taagaaaaaac 60
 aatggaattc caactacatt tctgtcaa atgtctaaaat atataaaatc tgtatctttt 120
 gtgttctctc ctgatttata ttctaaatgt gatgttatcc ttctctgcag aaataaagtg 180
 tctgaaagaa tgaaaaaaat ggaagaattc tttagtaagg tataaaatac cttttctatc 240
 tttgtagcat tctaagcctt ttgtcacctt tccaaactcc caacatgcca tattccctga 300
 staggccaca gccatgtaca ttgatccctt tattttcttc tctctgcctg agatttctct 360
 cattccccct tctctgcctg gtatatgatt gccattgtt taaggcccca actcaccttt 420
 ataattcttc tagccactt tctttatcgg tattccagaa aaaacaaaag aagcttcac 480
 aagacaacat tctgtaatac actgcttaac ttcttttgac cctgctgagt tcaaaaatct 540
 tatcttttta aggattgaat ggagtccacc aaggatctta tatttgacag gatttatgaa 600
 a 601

<210> 50
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 50
 gattgcccac tgtttaaggc cccaactcac ctttataatc ttcttagccc actttcttta 60
 tcgggtattcc agaaaaaaca aaagaagctt ccacaagaca acattctgta atacactgct 120
 taacttcttt tgacctgctt gagttcaaaa atcttatctt ttttaaggatt gaatggagtc 180
 caccaaggta tctatatattg acaggattta tgaaaacaaa aggatttggt gagaaagtgt 240
 gaagcctaac tctgaaacgt ggatcatagt gtttactaca cattaactgt ttagtggtat 300
 rtaatatgta ttattatagg ctgtggaatc agaacagggt tcaaatgttt tcaccgcttg 360
 ctagactgtg gccttgaggc tggtatttaa tgcctggagg cctcaaatgt taactaggaa 420
 tggtaagacc taccagtaa cttagcataa atagtaaatt cattcattta atgttttcaa 480
 acagtgccag acattgttta atgaactggg gatatagtgg tgaacaacac tgacagcggt 540
 cttcattgta ttctcaaaac cctccctata gtaagtaggt ctgtgtgtgt gtgtagggtc 600
 a 601

<210> 51
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 51
 taatcttcct agcccacttt ctttatcggg attccagaaa aaacaaaaga agcttcacaca 60
 agacaacatt ctgtaataca ctgcttaact tcttttgacc ctgctgagtt caaaaatctt 120
 atctttttta ggattgaatg gaggccacca aggtatctat atttgacagg atttatgaaa 180
 acaaaaggat ttgttgagaa agtttgaaag ctaactctga aacgtggatc atagtgttta 240
 ctacacatta actgttttag tggatgtaat agttattatt ataggctgtg gaatcagaac 300
 rgggttcaaa tgttttcacc gcttgctaga ctgtggcctt gggcatgtta tttaatgcct 360
 ggaggcctca aatgttaact aggaatggta agacctaccc agtaacttag cataaatagt 420
 aaattcattc atttaatgtt ttcaaacagt gccagacatt gtttaatgaa ctgggggat 480
 agtgggtgaa aacactgaca gcgttcttca ttgtattctc aaaaccctcc ctatagtaag 540
 taggtctgtg tgtgtgtgta ggtgcatggg gaataaaaaa taataagcaa ataataagaa 600
 g 601

<210> 52
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 52
 ttaaggattg aatggagtc accaagggtat ctatatattga caggatttat gaaaacaaaa 60
 ggatttggtg agaaagtttg aagcctaact ctgaaacgtg gatcatagtg tttactacac 120
 attaactgtt ttagtggtat taatagttat tattataggc tgtggaatca gaacagggtt 180
 caaatgtttt caccgcttgc tagactgtgg ccttgggcat gttatttaat gcctggaggc 240
 ctcaaatgtt aactaggaat ggtaagacct acccagtaac ttagcataaa tagtaaattc 300
 rttcatttaa tgttttcaaa cagtgccaga cattgtttta tgaactgggg atatagtggg 360
 gaacaacact gacagcgttc ttcattgtat tctcaaaacc ctccctatag taagtaggtc 420
 tgtgtgtgtg tgtaggtgca tgggggaataa aaaataataa gcaaataatg aacagggtta 480
 tttcaaaaag cagaaagagc tattcaacaa aactacctgc cttttattag atgaaactct 540
 caactctatg gtttgttctc tcctgtcaat tctgttaaat gctgtcagcc tgttttcctt 600
 a 601

<210> 53
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 53
 aactgtttta gtggatgtaa tagttattat tataggctgt ggaatcagaa cagggttcaa 60
 atgttttcac cgcttgctag actgtggcct tgggcatggt atttaatgcc tggaggcctc 120
 aaatgttaac taggaatggt aagacctacc cagtaactta gcataaatag taaattcatt 180
 catttaatgt tttcaaacag tgccagacat tgtttaatga actggggata tagtggtgaa 240
 caacactgac agcgttcttc attgtattct caaaaccctc cctatagtaa gtaggtctgt 300
 stgtgtgtgt aggtgcatgg ggaataaaaa ataataagca aataatgaac agggtaattt 360
 caaaaagcag aaagagctat tcaacaaaac tacctgcctt ttattagatg aaactctcaa 420
 ctctatgctt tgttctctcc tgtcaattct gttaaatgct gtcagcctgt tttccttctc 480
 accctggcca cgacttctgt cttttctgct tggtcctgta gactctaacc caaggctcat 540
 tctctgcctg gctatctgcc ttctgtggct ctttgccact acctacattt tctgtgttgc 600
 a 601

<210> 54
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 54
 ctggggatat agtgggtgaac aacactgaca gcgttcttca ttgtattctc aaaaccctcc 60
 ctatagtaag taggtctgtg tgtgtgtgta ggtgcatggg gaataaaaaa taataagcaa 120
 ataataagca gggtaatttc aaaaagcaga aagagctatt caacaaaact acctgccttt 180
 tattagatga aactctcaac tctatggttt gttctctcct gtcaattctg ttaaatgctg 240
 tcagcctgtt ttccttatca ccctggccac gacttctgtc ttttctgctt ggtcctgtag 300
 mctctaacc aaggctcatt ctctgcctgg ctatctgcct tctgtggctc ttgcccacta 360
 cctacatttt ctgtgttgca caggggaagg ccattccctg tggaccataa aattctcttt 420
 ttgaaagaat tcattcttga ttgggccaca gcacatcttg tgaaacagca ttagacattt 480
 gccactgctc agcagctctg ggggaaaatg tttactgaga agcgtacagt agtttttttg 540
 actaaccatg gtgcaacctc ctcccagagg gaaacctatg agtatttcaa ggacatgtga 600
 t 601

<210> 55
 <211> 601

<212> DNA
<213> Homo sapiens

<400> 55
ttaaacgaat tattgtagaa acagaaaaac aaatactgtg ttctcattta caggggggagc 60
taaaccttgg gtaaattgggg cataaagatg ggaacaatag acactaggga ctccaaaagg 120
ggggaggagg ggaggagggc aagggtctga aagcttccta ctgggtactt tggtcacaac 180
ctgggtgatg gcacgattag gagctcaaac cccagtatca cacagtatac ccttgtaaca 240
agctgatggt gtaacccttg aatctacaat aaaattatTT ttttttaaaa aatcattata 300
rggattttta aaaagaagga ttcttagaca ggtgcagcca aacaattttt tttaaatgtt 360
ggcaggccgc caccgccagt cacttatgct gcaatagccc atgtccaac attccaacc 420
tacttctctc caaaagagaa gctatacttt cagatggccc tgtgctgggt tctccctgga 480
agtttctggg gaaaggggct tgagttgccc cgactggact cttcctggag tgggagccgg 540
ggcttctgat cagacgtgag tgaggcagga actccgcggc ctcccagcgc agcccagagt 600
g 601

<210> 56
<211> 601
<212> DNA
<213> Homo sapiens

<400> 56
catgtcccaa cattcccaac ctacttctct ccaaaagaga agctatactt tcagatggcc 60
ctgtgctggg ttctccctgg aagtttctgg ggaaaggggc ttgagttgcc ccgactggac 120
tcttccctgga gtgggagccg gggcttctga tcagacgtga gtgaggcagg aactccgcgg 180
tctcccagcg cagcccagag tgcgggccca cgcaggctccc gggctcctgcg cgctcgcgcc 240
tttgcgctga agccgttagg atgagccctc tccttccaga gctttaaccg atgaagggtgc 300
wttgtgtttg gcgcccctga ggaggatgct gtcttaggcc tcttccact ggacgtgtgt 360
gggtgggcaga gatcccgttc gtcggctgca cttccacccc gctggggctc actcaggccg 420
cggagctgcg agggagacat cctcgatgga ctccctctac ggagatctct tttggtacct 480
ggactataac aaggatggga ccttggacat ttttgagctt caggaaggcc tggaggatgt 540
aggggccatt caatctctag aggaagcgaa ggtgggtctc actggggctg taatcagaga 600
g 601

<210> 57
<211> 601
<212> DNA
<213> Homo sapiens

<400> 57
accccgctgg ggctcactca ggccgcggag ctgcgagggg gacatcctcg atggactccc 60
tctacggaga tctcttttgg tacctggact ataacaagga tgggaccttg gacatttttg 120
agcttcagga aggcctggag gatgtagggg ccattcaatc tctagaggaa gcgaagggtg 180
gtctcactgg ggctgtaatc agagagacgt tggggctggg agccctggag aggcattggg 240
cagagagggc aaaatttaca tgttgtcaag cttgacctgg gcccactgca gtgttcaggt 300
sgttgaccag cgttaccgtt tattaagaat aacaacacag ctaacacatt tctcaagtat 360
ttttctccgt tttctccttg gctgtagtaa aatctccaac ttcagattgc tctcaagatg 420
ttggctacat acagccttgt cttaggagtc accttgttca atgtgctcac ctgtcattag 480
tcacccagag gggcgtctag gctaaagatg cgccctcccc agttcagaga actggaataa 540
tcactctacg tgtatttggg agtgggggtg tgattggaaa ttttctgatg ttatgttttg 600
g 601

<210> 58
<211> 601
<212> DNA
<213> Homo sapiens

<400> 58
gtgggttgacc agcggttaccg tttattaaga ataacaacac agctaacaca tttctcaagt 60
atTTTTctcc gTTTTctcct tggctgtagt aaaatctcca acttcagatt gctctcaaga 120
tgTTggctac atacagcctt gtcttaggag tcaccttggt caatgtgctc acctgtcatt 180
agtcacccag aggggcgctc aggctaaaga tgcgccctcc ccagttcaga gaactggaat 240
aatcactcta cgtgtatttg ggagtggggt ggtgattgga aatTTTctga tgttatgttt 300
yggTTTctgt tcctggaagg gggcagtgga agtggtttt actctcgggt ttcactagt 360
ctgaggTTTc ctcataatat gccttaattg atagacccta gttatcagta ccgagcttag 420
gctaaccctt ctcttcccca gaaggctaac ctacaggctc cttctcagca tgttgTgctt 480
cgtacatact cctattgcag tatttccaag tcatttttca tttggaattt attattgtat 540
ataataatta ctttataagt atatttgctc tttggatggt tgacccggtg gactgggaga 600
t 601

<210> 59
<211> 601
<212> DNA
<213> Homo sapiens

<400> 59
gtcatgttat ttaatgcctg gaggcctcaa atgttaacta ggtaatggta agacctaccc 60
agtaacttag cataaatagt aaattcattc atttaatggt ttcaaacagt gccagacatt 120
gtTTaatgaa ctggggatat agtggtgaac aacactgaca gcgttcttca ttgtattctc 180
aaaaccctcc ctatagtaag taggtctgtg tgtgtgtgta ggtgcatggg gaataaaaaa 240
taataagcaa ataatgaaca ataaaattat tttatttaaa aaaaaagaaa tgatacttac 300
vttgtcgtgt taagatacaa aagcaataac tttttattgt gaaaatagtc tgtttttgaa 360
caatatattg ttttgTTTT tctgtgaaa gttgagaaac taaatatacg aagagataat 420
ggtcagacca taaataaaaa tagaactttg actcaaaatt tacagcagtc tgcccagaaa 480
accagccctt tatctaaaat aaacagacca ggaaaccagc ctgttatgtc agacttatag 540
gaagtCaggT tgctatctct agagacaata cacaagcta tgcaataact gctgtaacag 600
c 601

<210> 60
<211> 601
<212> DNA
<213> Homo sapiens

<400> 60
tacaggcggtg agccaccatg cgcccagcca tagactatat atTTTTgatc tgataactgg 60
ttcagctact aagtgactaa caggcaagta gcatctatag tgtggatatg ctggacaaaa 120
ggacattcac ctctgggca ggatggcaca gaatgttgag agattttatc atgctactca 180
gaatggTgtg caatttaaaa cttatgagtt gtttgTTTct ggagTTTTcc atttaatagt 240
tcagaccatg gattgaccgc aggtaactga aactgtggag agtgaaactg tggataagg 300
rggactattg tattgttaag tcagactcat taggcaatca taactcttga tttgccatca 360
gaaatgctgc agaaatatgg gttaaaaaaa actgttcaaa aataggggtc gggatgtcct 420
ttaacttggt acttccaaaa tgttagtga aactgtggcc ccaaagagt aaaggaacaa 480
atgactaaga gaaaatcttg ttttcaggat gacagattaa aaaagaagca acttgctgaa 540
acactgaaaa tctctccact tgtaagataa cacaaaactg gctaaaactg gttggaatga 600
a 601

<210> 61
<211> 601
<212> DNA
<213> Homo sapiens

<400> 61


```

ataggggtcag ggatgtcctt taacttggtta cttccaaaat gttagtgaag actgtggccc 60
caaagagtga aaggaacaaa tgactaagag aaaatcttgt tttcaggatg acagattaaa 120
aaagaagcaa cttgctgaaa cactgaaaat ctctccactt gtaagataac acaaaactgg 180
ctaaaactgg ttggaatgaa tatggccaac tcaagtctgc acagaactaa cttggtgatg 240
ttacagccca aatttccacc acatatTTTta tactaactcc ccccggtatt tcacacatga 300
yctgtgaggt agcatgaaga ggtaactatg catgcctaag gacttggggag acctccccat 360
ttccttccac caatcaccca ctaatcccag aatccgcccc caaacctttt ctaataacta 420
ccttaaagcc agcatagggg gacagatttg agctggactc ctgtcttctt gtgggtcacc 480
ttgcaataaa aagcttttct tttctcaaca cctggtatta tagtattgac ttctagtcca 540
tcgggcagca agcccccttt ggtcgggtgac tattcttgtt cgctgatatt tccattggcc 600
a 601

```

```

<210> 62
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 62
actaatccca gaatccgccc ccaaacccttt tctaataact accttaaagc cagcataggg 60
agacagattt gagctggact cctgtcttct tgtgggtcac cttgcaataa aaagcttttc 120
ttttctcaac acctggtatt atagtattga cttctagttc atcgggcagc aagccccctt 180
tggtcgggtga ctattcttgt tcgctgatat ttccattggc caaaatataa acctcttaga 240
tgaaacttca gtacgtaaat ggcgccacag aatgctgtga catTTTTctc ttggattata 300
rcaggttact ttactgaata ccgtaggcag ttataacaca ctaagtattt gtgtatctaa 360
acatagaaaa gatacagtaa aaatatggta atTTTTttca acttttagtt gagatttggg 420
gggtatgtgc acatttggtt caagggtata ttgcatgatg ctgaggtttg gggtaacaatt 480
gaaccctgtc acccaggtag tgagcatagt acccaatcga taatttttca acccttgtcc 540
attccctccc cgttcttgta gtccccagtt tctgcttttc ccactcttat atccgtgtgc 600
a 601

```

```

<210> 63
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 63
ctcaacacct ggtattatag tattgacttc tagttcatcg ggcagcaagc cctttttggt 60
cggtgactat tcttggtcgc tgatatttcc attggccaaa atataaacct cttagatgaa 120
acttcagtac gtaaatggcg ccacagaatg ctgtgacatt tttctcttgg attatagcag 180
gttactttac tgaataccgt aggcagttat aacacactaa gtatttgtgt atctaaacat 240
agaaaagata cagtaaaaat atggtaattt ttttcaactt ttagttgaga tttggagggg 300
rtgtgcacat ttgttacaag ggtatattgc atgatgctga gggttggggg acaattgaac 360
cctgtcaccc aggtagttag catagtaccc aatcgataat ttttcaaccc ttgtccattc 420
cctccccgtt cttgtagtcc ccagtttctg cttttcccat ctttatatcc gtgtgcaccc 480
catgttttgc tcccatgtgt atgtgagaac ttgtggtgtt tggttttcta tttctgcgtt 540
gattcgctta ggataatggc cttcagctgc atccatgttg ctgcagagga cgtgatttta 600
t 601

```

```

<210> 64
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 64
aggagtttat caattttatt agtcttttca aagaaccatc ttttggcttt gttaatcctc 60
ccaatgggtg gttttcttcc tcattacttt ttgctcttta tttccttcaa cttctttttt 120

```

```

gcttaatttt aaaataattt cttgagattg agataagcct caatgatggg tcaccgattt 180
ccagtctttc ttcttttcta attatgcatt ttaaaccaga aatctttctc taagtgtagc 240
tttagttgca gtcacaaagt ttcagatctg tctctcagtc tggagggttg agatctgacc 300
rtgacatga aaccatccag tcacaatgtg gcattatttt ttttaatttt tttttttttt 360
ttgagataga gtttctactct tattgcctag gctgggtgtgc aatgggtgcga tctcggctca 420
cagcaacctc cacctcccag gttcaagcga ttcttttgcc tcagcctccc aagtagctgg 480
gattacaggc atgcgccacc atgcccaact aattttgtat ttttagtaga gatggggggt 540
ctccatgttg gtcagggttg tcttgaactc ccgacctcag gtgatccgcc cacctcagcc 600
t 601

```

```

<210> 65
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 65
gtggcattat tggttcatat ttttattttt tagacttcct taatgcaaaa catatacagt 60
tgatcctcat tatttgggga ttctgtattt gcaaatgtgc ctactcaata aaatttatcc 120
ccaaagtaac cccaaaatat atactcacag tactttccca ggcattcatg gacatgcaca 180
gagcagtga aaacttgagt tgctcagcat gtacattcct agctagtaga ataaggcaat 240
actctgcctt cttgtttcag ctctcactat attactagc aagtatccct ttcaaggctc 300
rttttgtgcc agtttttgca tttttgtatt tttggtggta atttcctttt taaaatgttc 360
cccaaaggta gtgctgaagt gctgtctagt gttcctaagt gcaagaaagc catagcatgc 420
cttatggaga aaatatatgc gttggataag ctttgcccca aattcaatgt tagtgaatca 480
acagcacaca ttaaatgagg tgccctcaaa cagaaacaga cataagacat gggttatgtat 540
taatcagttg atgaaagtgt tgtaatcaga ggctcacagg aacctaaccg tgtttttcct 600
g 601

```

```

<210> 66
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 66
ctcacagtac tttcccaggc attcatggac atgcacagag cagtgaaaaa cttgagttgc 60
tcagcatgta cattcctagc tagtagaata aggcaatact ctgccttctt gtttcagctc 120
tcatactatt aactagcaag tatccctttc aagggtctatt ttgtgccagt ttttgcattt 180
ttgtattttt gttggtaatt tcctttttta aatgttcccc aaaggtagtg ctgaagtgtc 240
gtctagtgtt cctaagtgca agaaagccat agcatgcctt atggagaaaa tatatgcgtt 300
kgataagctt tgccccaat tcaatgttag tgaatcaaca gcacacatta aatgaggtgc 360
cttcaaacag aaacagacat aagacatggt tatgtattaa tcagttgatg aaagtgttgt 420
aatcagaggc tcacaggaac ctaaccctgt ttttcctgta ggaacaatgg tttggatttt 480
gctaattcag tgtttgcaat gaatatagaa ctttatggaa gatgattgct gtgaataatg 540
agaattaacc atatctcttt aagagtgcac ttctaaagga gaatatcag aagggtattt 600
g 601

```

```

<210> 67
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 67
tcagcatgta cattcctagc tagtagaata aggcaatact ctgccttctt gtttcagctc 60
tcatactatt aactagcaag tatccctttc aagggtctatt ttgtgccagt ttttgcattt 120
ttgtattttt gttggtaatt tcctttttta aatgttcccc aaaggtagtg ctgaagtgtc 180
gtctagtgtt cctaagtgca agaaagccat agcatgcctt atggagaaaa tatatgcgtt 240

```

```

ggataagctt  tgccccaat  tcaatgttag  tgaatcaaca  gcacacatta  aatgagggtgc  300
sttcaaacag  aaacagacat  aagacatggg  tatgtattaa  tcagttgatg  aaagtgttgt  360
aatcagaggc  tcacaggaac  ctaaccctgt  ttttctgtga  ggaacaatgg  tttgggtattt  420
gctaattcag  tgtttgcaat  gaatatagaa  ctttatggaa  gatgattgct  gtgaataatg  480
agaattaacc  atatctcttt  aagagtgcct  ttctaaagga  gaatattcag  aaggggtattt  540
gcataatttc  tttactaaca  gatgctgcct  ctcactgtcc  ttacatgggc  cagatttctca  600
t                                                    601

```

```

<210> 68
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 68
tctctcagaa  tctgtcatc  tcttccaggg  tcttttctcc  aagaaagtct  atcctttcac  60
cactaacagt  aattttgggc  ttctcttttt  tctggagaag  tcagctgttt  atgctgcttc  120
agcaccagac  cctctcttac  tttgttttgt  ttcatctttt  ttcattgtaca  gtagtcttag  180
gattctcatg  agcctgtgag  ctgctagaag  gaaatacagc  agtgcttaca  tttattgctt  240
ctattttatt  ttctattttt  tcttctgtgc  ttctgattgt  tctccttctg  tccacaaaca  300
ygctctaatt  tccctagtat  taaaaatttt  ctgtcttttg  ttgttctttt  atccttgctc  360
ccttattttt  actgccagat  ttttattttt  atttatttat  ttttgagatg  gagtctcact  420
ctgtcaccca  ggctgggggt  cagtggcgcg  atctcagctc  actgcaacct  ccgcctccca  480
gcttcaagca  attttctctt  ttttagcctc  caagtagctg  ggattatggg  cacctgccac  540
catgcctggc  tgatttttct  attttttagt  gagacggggg  ttcaccatgt  tggccacact  600
g                                                    601

```

```

<210> 69
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> variation
<222> (301)...(301)
<223> T may be either present or absent

```

```

<400> 69
cactctgtca  cccaggctgg  ggtgcagtg  cgcgatctca  gctcactgca  acctccgcct  60
cccagcttca  agcaattttt  ctcttttagc  ctcccaagta  gctgggatta  tgggcacctg  120
ccaccatgcc  tggctgattt  ttctattttt  agtagagacg  gggtttcacc  atgttgacca  180
cactgctctc  taactgctga  cctcagggtg  accacccgcc  tcagcctcca  aaagtgctgg  240
gattgcaggt  gtgagtcact  gtgcctggcc  ttttactgcc  agatttttaa  aagaatagtc  300
tgtgctttag  ctctattttc  tcatttacta  cttctcttta  actcagtcac  atatgatgtt  360
ttgcatagta  aatgtctagt  aatttattaa  aaatgtagaa  ataggacttt  ttaaaatgaa  420
tagatcctac  ttttaattgaa  tttatcttgg  agttagaata  tcttgatttg  gatttttagtt  480
ctgctacttc  ttaattacat  tacttggtaa  ggccacttgt  gaagtcagtc  tctttggagg  540
aatattattt  atctataagg  ctgttacaat  tactgaattt  taaaaaatgt  gtatttattt  600
t                                                    601

```

```

<210> 70
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 70
tagtaattta  ttaaaaatgt  agaaataggt  acttttaaaa  tgaatagatc  ctactttaat  60

```

```

tgaatttatac ttggagttag aatatcttga tttggatttt agttctgcta cttcttaatt 120
acattacttg gtaaggccac ttgtgaagtc agtctctttg gaggaatatt atttatctat 180
aaggctgtta caattactga attttaaaaa atgtgtattt attttttaat gtatttggtta 240
catttttagt attgatgttg ggataggcat ttaagcaagt ctataactca cctacatgca 300
yaattttgcc ttaatcagtt taaagctttc tcttaaatga gagatttgaa attcataatt 360
tctgtggttc ttatcagttc tgagttttat tttttgccct ttttattttt ttaaaggaaa 420
aattgaggct tcagaaattg tccagttctt ccagacactg ggtctgacta tttctgaaca 480
acaagcagag ttgattcttc aaaggtaagc tcttcatgtt ggtcaacaat tgactttcac 540
tttaatatcc tgcattagaa ctctgtgttt gtaagtgtgg ctttaaaaaca cctccctagt 600
c 601

```

<210> 71
 <211> 601
 <212> DNA
 <213> Homo sapiens

```

<400> 71
gagttagaat atcttgattt ggatttttagt tctgctactt ctttaattaca ttacttggtta 60
aggccacttg tgaagtcagt ctctttggag gaattattat tatctataag gctgttacaa 120
ttactgaatt ttaaaaaatg tgtatttatt ttttaatgta tttgttacat ttttagtatt 180
gatgttggtg taggcattta agcaagtcta taactcacct acatgcataa ttttgcctta 240
atcagtttaa agctttctct taaatgagag atttgaaatt cataatttct gtggttctta 300
ycagttctga gttttatttt ttgccctttt tattttttta aaggaaaaat tgagggttca 360
gaaattgtcc agtctctcca gacactgggt ctgactattt ctgaacaaca agcagagttg 420
attcttcaaa ggtaagctct tcatgttggg caacaattga ctttcacttt aatatcctgc 480
attagaactc tgtgtttgta agtgtggctt taaaacacct ccctagtctt cattatgtat 540
atccaagatc tttttgtctt ttttctctcc attcattttg tatgtgtaca tttatctaaa 600
g 601

```

<210> 72
 <211> 601
 <212> DNA
 <213> Homo sapiens

```

<400> 72
gtattgatgt tgggataggc atttaagcaa gtctataact cacctacatg cataatttttg 60
ccttaatcag tttaaagctt tctcttaaag gagagatttg aaattcataa tttctgtggg 120
tcttatcagt tctgagtttt attttttgcc ctttttattt ttttaaagga aaaattgagg 180
cttcagaaat tgtccagttc ctccagacac tgggtctgac tatttctgaa caacaagcag 240
agttgattct tcaaaggtaa gctcttcatg ttggtcaaca attgactttc actttaatat 300
yctgcattag aactctgtgt ttgtaagtgt ggcttttaaaa cacctcccta gtcttcatta 360
tgtatatcca agatcttttt gtcttttttc ctcccattca ttttgatatgt gtacatttat 420
ctaaagtgtg agaatgggaa gtgtaagctc agactggact ctttctttca aggccataaa 480
ggatagtgtg atggcaggaa gtaaggtttt aactccatag atgaggagct gaagagtttt 540
ggtgttgctt tttctccatt tgattttctaa tgtgacagta aaactcattg attcaaaacta 600
a 601

```

<210> 73
 <211> 601
 <212> DNA
 <213> Homo sapiens

```

<400> 73
cattgattca aactaagaag actagcagat tcatcacatt atttaacctg gatgtgactg 60
gaaaaaaggg aaattactaa gctctccaag ctaacaaaga aatacctgtt taaactttca 120
gaaaacagaa atgcaaattt gaaccttatt gtctggggca atcagtttga ctattttaagt 180

```

```

cagactttta tactcttaat gttttgtttc atgggataga gcagtaatct ctgcagccca 240
ggtgctctca aatactctgt tgctataaac acagggcagg aactgatttt ttatgataac 300
rtaaaacaga aaaggacaat tatattgtat taatattggt gtgaatattt tcagtcctca 360
cattgtctaa aaatctttct aaatggcttt gttattgaat ttatctcatt ttatatctgt 420
gccaacagca ttttcatcct ttctcttcat aatttctttt acaaacagct gctcaagagg 480
aaggctcaaa gtctcaaggc tgagcacgta atgacttttg ttagtactag atgagaaggg 540
ctttcctgag gaaatgaaaa cctaaaacat gaaaagaaga taaacagaat ttggacagtg 600
a                                                                 601

```

```

<210> 74
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> variation
<222> (301)...(301)
<223> 'A' may be either present or absent

```

```

<400> 74
aaactaagaa gactagcaga ttcatacat tatttaacct agatgtgact ggaaaaaagg 60
gaaattacta agctctccaa gctaacaaag aaatacctgt ttaaactttc agaaaacaga 120
aatgcaaat tgaaccttat tgtctggggc aatcagtttg actatttaag tcagactttt 180
atactcttaa tgttttgttt catgggatag agcagtaatc tctgcagccc aggtgctctc 240
aaatactctg ttgctataaa cacagggcag gaactgattt tttatgataa cgtaaacag 300
aaaaggacaa ttatattgta ttaatattgt tgtgaatatt ttcagtcctc acattgtcta 360
aaaatctttc taaatggctt tgttattgaa tttatctcat tttatatctg tgccaacagc 420
attttcatcc tttctcttca taatttcttt tacaacagc tgctcaagag gaaggctcaa 480
agtctcaagg ctgagcacgt aatgactttt gttagtacta gatgagaagg gctttcctga 540
ggaaatgaaa acctaaaaca tgaaaagaag ataacagaa tttggacagt gagatataga 600
g                                                                 601

```

```

<210> 75
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 75
cagaaatgca aatttgaacc ttattgtctg gggcaatcag tttgactatt taagtcagac 60
ttttatactc ttaatgtttt gtttcatggg atagagcagt aatctctgca gccaggtgc 120
tctcaaatac tctgttgcta taaacacagg gcaggaactg attttttatg ataacgtaaa 180
acagaaaagg acaattatat tgtattaata ttgttgatga tattttcagt cctcacattg 240
tctaaaaatc tttctaaatg gctttgttat tgaatttatc tcattttata tctgtgccaa 300
yagcattttc atcctttctc ttcataattt cttttacaaa cagctgctca agaggaaggc 360
tcaaagtctc aaggctgagc acgtaatgac ttttgtagt actagatgag aagggtttc 420
ctgaggaaat gaaaacctaa aacatgaaaa gaagataaac agaatttgga cagtgaagata 480
tagagcatat aatattctgc ttctaaagta atattcttct aggaaagtga gggcgtttcc 540
ctggctgtta ggccagaaat catattccta tattttcttt gatagcttta ggaataatgc 600
a                                                                 601

```

```

<210> 76
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<220>

```

<221> variation
 <222> (301)...(301)
 <223> T may be either present or absent

<400> 76
 tgaaccttat tgtctggggc aatcagtttg actattttaag tcagactttt atactcttaa 60
 tgttttgttt catgggatag agcagtaatc tctgcagccc aggtgctctc aaatactctg 120
 ttgctataaa cacagggcag gaactgattt tttatgataa cgtaaaacag aaaaggacaa 180
 ttatattgta ttaatattgt tgtgaatatt ttcagtcctc acattgtcta aaaatctttc 240
 taaatggctt tgttattgaa tttatctcat tttatatctg tgccaacagc attttcatcc 300
 tttctcttca taatttcttt tacaacacagc tgctcaagag gaaggctcaa agtctcaagg 360
 ctgagcacgt aatgactttt gttagtacta gatgagaagg gctttcctga ggaaatgaaa 420
 acctaaaaca tgaaaagaag ataaacagaa tttggacagt gagatataga gcatataata 480
 ttctgcttct aaagtaatat tcttctagga aagtgagggc gtttccctgg ctgttaggcc 540
 agaaatcata ttcctatatt ttctttgata gctttaggaa taatgcaaatt tctaagccca 600
 a 601

<210> 77
 <211> 601
 <212> DNA
 <213> Homo sapiens

<220>
 <221> variation
 <222> (301)...(301)
 <223> C, T, or neither (single base deletion) may be present.

<400> 77
 gaaccttatt gtctggggca atcagtttga ctattttaagt cagactttta tactcttaat 60
 gttttgtttc atgggataga gcagtaatct ctgcagccca ggtgctctca aatactctgt 120
 tgctataaac acagggcagg aactgatttt ttatgataac gtaaaacaga aaaggacaat 180
 tatattgta taatattgtt gtgaatattt tcagtcctca cattgtctaa aaatctttct 240
 aaatggcttt gttattgaat ttatctcatt ttatatctgt gccaacagca ttttcatcct 300
 ytctcttcat aatttctttt acaaacagct gctcaagagg aaggctcaaa gtctcaaggc 360
 tgagcacgta atgacttttg ttagtactag atgagaaggg ctttccctgag gaaatgaaaa 420
 cctaaaacat gaaaagaaga taaacagaat ttggacagtg agatatagag catataatat 480
 tctgcttcta aagtaatat cttctaggaa agtgagggcg tttccctggc tgttaggcc 540
 gaaatcatat tcctatattt tctttgatag ctttaggaat aatgcaaatt ctaagcccaa 600
 g 601

<210> 78
 <211> 601
 <212> DNA
 <213> Homo sapiens

<220>
 <221> variation
 <222> (301)...(301)
 <223> C may be either present or absent

<400> 78
 accttattgt ctggggcaat cagtttgact atttaagtca gacttttata ctcttaatgt 60
 tttgtttcat ggggatagag agtaatctct gcagcccagg tgctctcaaa tactctgttg 120
 ctataaacac agggcaggaa ctgatttttt atgataacgt aaaacagaaa aggacaatta 180
 tattgtatta atattgttgt gaatattttc agtcttcaca ttgtctaaaa atcttttctaa 240

```

atggcctttgt tattgaattt atctcatttt atatctgtgc caacagcatt ttcacccctt 300
ctcttcataa tttcttttac aaacagctgc tcaagaggaa ggctcaaagt ctcaaggctg 360
agcacgtaat gacttttgtt agtactagat gagaagggtt ttcctgagga aatgaaaacc 420
taaaacatga aaagaagata aacagaattt ggacagttag ataatagagca tataatattc 480
tgcttctaaa gtaatatctt tctaggaaag tgaggggcgtt tccctggctg ttagggccaga 540
aatcatattc ctatatcttc tttgatagct ttaggaataa tgcaaattct aagcccaagc 600
t
601

```

```

<210> 79
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 79
atattttcag tcttcacatt gtctaaaaat ctttctaaat ggctttgtta ttgaatttat 60
ctcattttat atctgtgcc aacagcattt catcctttct cttcataatt tcttttaca 120
acagctgctc aagaggaagg ctcaaagtct caaggctgag cacgtaatga cttttgttag 180
tactagatga gaagggtt cctgaggaaa tgaaaacctt aaacatgaaa agaagataaa 240
cagaatttgg acagttagat atagagcata taatatcttg cttctaaagt aatattcttc 300
haggaaagtg agggcgcttc cctggctgtt aggccagaaa tcatattcct atattttctt 360
tgatagcttt aggaataatg caaattctaa gcccaagctt cagaatagac taagaagtat 420
tagcttagct gccatgacaa aataccatag gctggatgca ttaaacaatg gaaatttagt 480
ttttcacagg tctgggagct gggaagttta agatgagagt gccagcatgg ttgggttgta 540
gtgagggtc tctttctggc ttgcagatag accccttctc actgtattgt catatggcag 600
a
601

```

```

<210> 80
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 80
cattgtctaa aaatctttct aaatggcttt gttattgaat ttatctcatt ttatatctgt 60
gccaacagca ttttcacctt ttctcttcat aattctttt acaaacagct gctcaagagg 120
aaggctcaaa gtctcaaggc tgagcacgta atgacttttg ttagtactag atgagaaggg 180
ctttcctgag gaaatgaaaa cctaaaacat gaaaagaaga taaacagaat ttggacagt 240
agatatagag catataatat tctgcttcta aagtaatat cttctaggaa agtgagggtg 300
kttccctggc tgttaggcca gaaatcatat tcttatattt tctttgatag ctttaggaat 360
aatgcaaat ctaagcccaa gcttcagaat agactaagaa gtattagctt agctgccatg 420
acaaaatacc ataggctgga tgcattaaac aatggaaatt tagtttttca cagggtctggg 480
agctgggaag tttaagatga gagtgccagc atgggtgggt ttagtgagg gctctcttct 540
tggtctgcag atagaccctt tctcactgta ttgtcatatg gcagagagag agagagagag 600
a
601

```

```

<210> 81
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> variation
<222> (301)...(301)
<223> A, G, or neither (single base deletion) may be
      present

```

```

<400> 81

```

```

gaaagtgagg gcgtttccct ggctgttagg ccagaaatca tattcctata ttttctttga 60
tagcttttagg aataatgcaa attctaagcc caagcttcag aatagactaa gaagtattag 120
cttagctgcc atgacaaaat accataggct ggatgcatta aacaatggaa atttagtttt 180
tcacaggtct gggagctggg aagtttaaga tgagagtgcc agcatggttg ggttgtagt 240
agggctctct ttctggcttg cagatagacc cttctcact gtattgtcat atggcagaga 300
ragagagaga gagagagaga gagagagaga ggggatcttt ctcttgcttt ctattataag 360
gccatagtcc tgttggatca gggttccatt cttatgactt tatttgactt tcccccccta 420
agatgctatc tccagatata atcacacggg ggggttagggc ctcaacattt ggatttgagg 480
gggacacagc tcagtccata gcaaaggata atgcagaggg ttggatattt aaaagtagct 540
acacaatttt taatataaat attttatggg aacttttttt tttttttgag atggagtcta 600
g 601

```

```

<210> 82
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 82
atctttctct tgcctttctat tataaggcca tagtctggt ggatcagggt tccattctta 60
tgactttatt tgactttacc cccctaagat gctatctcca gatataatca cacggtgggt 120
tagggcctca acatttggat ttgggaggga cacagctcag tccatagcaa aggataatgc 180
agaggggttg atatttaaaa gtagctacac aatttttaat ataaatattt tatggtaact 240
tttttttttt tttgagatgg agtctagctc tgttgcccag gctggagcgc aatggtgcga 300
dctcagctca ctgcaacctc cgctcccag gttcaagcaa ttctctgcc tcagcctcct 360
gagtagttgg gactataggg acgcgccacc acgcctgggt attttttttt tatttttact 420
agagacgggt ttgcaccata ttggtcaggc ttgtctcgaa ctcttgacat cagggtgatcc 480
acccatcttg gcctcccaaa gtgctgggat tacagaagtg agccaccgcg cctagccagc 540
agctttactg agatgtaatt cacatgccat aaattcactt ttctaaagta tacaattcag 600
t 601

```

```

<210> 83
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> variation
<222> (301)...(301)
<223> T may be either present or absent

```

```

<400> 83
atataatcac acggtggggt agggcctcaa catttggtt tgggaggggac acagctcagt 60
ccatagcaaa ggataatgca gaggggttga tattttaaag tagctacaca atttttaata 120
taaataatttt atggtaactt tttttttttt ttgagatgga gtctagctct gttgccagg 180
ctggagcgca atgggtgcgat ctgagctcac tgcaacctcc gcctcccagg ttcaagcaat 240
tctctgcct cagcctcctg agtagttggg actataggca cgcgccacca cgcctggcta 300
tttttttttt atttttacta gagacgggtt tgcaccatat tggtcaggct tgtctcgaa 360
tctgacatc aggtgatcca cccatcttgg cctcccaaag tgctgggatt acagaagtga 420
gccaccgcgc ctagccagca gctttactga gatgtaattc acatgccata aattcacttt 480
tctaaagtat acaattcagt gacttaaaac atttatttat ttttaaattg acagaattac 540
atgtatttat catgtacaac atgatgtttt gaagtatatg tacattgttg agtgactaag 600
t 601

```

```

<210> 84
<211> 601
<212> DNA

```


<213> Homo sapiens

<400> 84

```
ttctcttagt atttttcaag aatataatat attattatta attgtagtct tcatgttgta 60
tagtggagct cttgaactta ttctcatgt caagctgaaa ttgtgtgtcc tttaacacaa 120
accatacccg actcccaaag tattctgctc tctgcttcta tgagattaac tttttctgat 180
tccacatgag tgagatcatg cagtatttat ttgtctttac ctggcttatt tcattcatat 240
tgttacagat aacaggattt ccttcttttt ttaatggccg aatagttttc tattgtatat 300
rtatagcaca ttttctctct tcatgcattg gtggacactt aggttgattc cgtatcttgg 360
ctatcgtgaa tagtgctata atgaacatgg gaatgcacat ggctctttga catattgatt 420
tcattttata tatgtgtata tatatatgta tacacacaca tacatacagt ggtgggattg 480
caggatcata tggtagttct atatttaatt tttaaaggaa ctccatactg ctttccataa 540
tggtgtatt agtttaactc ctcaccaaca ggtgcaaaa gttccctttt ctctacatac 600
t                                                                 601
```

<210> 85

<211> 601

<212> DNA

<213> Homo sapiens

<400> 85

```
tttgttctag agtatagttt aagtctgatg tttcttactg attttctggt gagatgattt 60
gtctattgct gaaggtaggg tgttgaagtc ccctactatt gctgtattgc agtctctctc 120
tcctttcaga cgtattaatg gtttttattt tattttattt gttgttgttg ttgttgttgt 180
tggtgttttt gagacggagt ctactctgt caccaggctg gagtgcagtg gcagggtctc 240
ggctcactgc agcccccgtc tcacggttca agcgattctc ctgcctcagc ctcccgagtc 300
rctgggacta caggcgcatg ccaccacgcc cagctaattt ttgtattttt agtaaagacg 360
gggtttcacc atgttggcca ggatggtctt gatctcttga cttcatgatc caccgcctt 420
ggcctcccaa agtgetggga ttacagggtg gagccaccac ccctggccaa tgtttggtat 480
ttatcttttag gtgctctgat gttgggttca tatatattta taaaaaacia tagctacata 540
acttattaag ggatatgcaa tataaaatat ataaattgtg aactgaaaa tttaaaatgg 600
g                                                                 601
```

<210> 86

<211> 601

<212> DNA

<213> Homo sapiens

<400> 86

```
tctgatgttt cttactgatt ttctgttgag atgatttgtc tattgctgaa ggtaggggtgt 60
tgaagtcccc tactattgct gtattgcagt ctctctctcc tttcagacgt attaatgggt 120
tttattttat tttatttggt gttgttgttg ttgttgttgt tgtttttgag acggagtctc 180
actctgtcac caggctggag tgcagtggca gggctctcggc tctactgcagc ccccgctctc 240
cggttcaagc gattctcctg cctcagcctc ccgagtcgct gggactacag gcgcatgcca 300
ycacgcccag ctaatttttg tatttttagt aaagacgggg tttcaccatg ttggccagga 360
tggtcttgat ctcttgactt catgatccac ccgccttggc ctcccaaagt gctgggatta 420
cagggtgtgag ccaccacccc tggccaatgt ttggtattta tctttagggt ctctgatgtt 480
gggttcatat atatttataa aaaacaatag ctacataact tattaaggga tatgcaatat 540
aaaatatata aattgtgaca ctgaaaattt aaaatgggag gagtggagta aaagtacctt 600
c                                                                 601
```

<210> 87

<211> 601

<212> DNA

<213> Homo sapiens

```

<400> 87
agtgctggga ttacaggtgt gagccaccac ccctggccaa tgtttggtat ttatcttttag 60
gtgctctgat gttgggttca tatatatatta taaaaaacia tagctacata acttattaag 120
ggatatgcaa tataaaatat ataaattgtg acactgaaaa tttaaaatgg gaggagtggg 180
gtaaaagtac cttcatataa cttactatta tatcctctta ttgaattgac ccttttatca 240
ttatatagga actttgtttc tcctttacaa cttctgactt aaagtttggt ttatatgata 300
yaagtaaagt tactcctgct ctcttttggg ttctgtttcc atggaatata tttttccatt 360
ccttcaccat cagtctgtgt gtattttttac agatgaaatg agtctgtcat gggcagcata 420
tagttggatc tagttttttt aatccactca gacactgtgt tttttgattg gataatttaa 480
tccattcatg ttcaaggtaa ttattgataa gtaaggactt tgtactacca ttttgcttat 540
tgtttcatgg ttctttttata gatcctttat tcttttcttc ctctcttgct gtctttttttt 600
t 601

```

```

<210> 88
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 88
ggtttttggg ttgtgggttac caagagggtta caaaaaacat cttaagagtt ataatagttt 60
attttaactt gataacttaa tttttattgc aaaaaccccc caaaacaaaa aaatctacac 120
ttttacttaa tccctgaaa ttttgaattt ttgatgtcac agtttacctc ttttcatatt 180
gtgtatccct taaattattg tagctattat tacttttaat agttttctct ttcctactac 240
agatgtaagt gatttgcata ccatcattac agtattattt tgaatttacc tgtgtacttt 300
yttttatcag ccagttttat actttcagat gtttttgtgt tactcattag catctttttc 360
tttcagcttg aggagctcct tttacgtttc ttataaaata ggtgcgggtca tgattatctc 420
cctcagctat tgtttgtctg ggaaagtatc tctccttcat ttctgaagga cactttgctg 480
ggtagattac ccttggttgg tatttttctc cttgaacgct ttaaataatat catccctttc 540
tctcctgacc tgtaggtct ctgctgacca gtctgtttcc aaccatattg ggactgtctt 600
a 601

```

```

<210> 89
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 89
attttaacca tccattgttt ctgcttctct agataaccct gactaatata taattgggtat 60
gaagtgatat ctcatggctt tgatttatat ttctttcatg gctagtgtact tttttgtac 120
ttttgggata ttgttattat tattattatt attactagtg tttatacttc ttcagtaaaa 180
gtgttagaaa caatttttaa aggcagaatg tgaccagagt ttctgtagt tatataacca 240
tcatggacct tccctcaagt gctaagccat tagtgttact catgtcactc caaatgtcag 300
sttgttttct tccatttcac tgtctctttg tgtcccaaac ttgaattcat gggaaaaaca 360
tctgaatggg gcttaatatg gtttggatat ttgtccctc caaatctcat gttgaaatat 420
gacctccagt gttggaagta gggactactt gggtcacgag agtggatcct tcattaatgg 480
cttggaata agtgaactct attagttcat gaaagctggg tggtgataag agcctggcat 540
ctcatttctc ttgtccttct ctcaccatct gacacacttg ctcacctttt ttcttcagcc 600
a 601

```

```

<210> 90
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 90
ttccagagtg tagaagtaca ctgtcctatc ctttctagga gatcattata acaccaaaaag 60

```

cagacagtat	atgaaacagg	gaaattagag	gccaaagatac	ctatgactta	tatgtaaaaa	120
tttaaagaaa	atattagcaa	actgaatcag	ccatttttaaa	aaatatacca	caatcaatgc	180
attcataaga	gcagcttaac	aaaatttggt	agaaggcatt	aaagaagact	cagtatagaa	240
aagatgtacc	ttctctccaa	attggtgata	gagattcaat	gccattaaaa	aaacccacct	300
kgtttttttg	aggaacttgt	caagctgagt	ctcaaattta	tatcaaagag	caaaggccta	360
agaatatcca	ggacattcct	gaagaactgt	aaggagccag	gggcctgccc	tatcagatac	420
caagggttgt	tattaagcca	taaccaagtc	agtgtgtgtt	ctacagaaac	agacaagtta	480
acaagtgaag	cataatagag	agcccagaaa	cagacccatc	catattttgg	atttgtcacg	540
tgaaagaagt	agctttgcaa	aactttggga	aaaggagagt	gtgtgcaata	gatgatgctc	600
g						601

<210> 91
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 91						
taaagaagac	tcagtataga	aaagatgtac	cttctctcca	aattggtgat	agagattcaa	60
tgccattaaa	aaaaccacc	tggttttttt	gaggaacttg	tcaagctgag	tctcaaattt	120
atatcaaaga	gcaaaggcct	aagaatatcc	aggacattcc	tgaagaactg	taaggagcca	180
ggggcctgcc	ctatcagata	ccaagggttg	ttattaagcc	ataaccaagt	cagtgtgtgt	240
tctacagaaa	cagacaagtt	aacaagtga	acataataga	gagcccagaa	acagacccat	300
mcatattttg	gatttgtcac	gtgaaagaag	tagctttgca	aaactttggg	aaaaggagag	360
tgtgtgcaat	agatgatgct	cgtgtcatg	cagacaaaaa	ggaaattggg	atacctgcct	420
cttaccgtac	acaaacacca	acctaaccgt	gaaagttaaa	ctataacagc	ttgaggtggt	480
ggggaagaaa	tatctttatc	tcagtgtagg	gaagaattta	ttttaaaaag	aagacacaaa	540
aggccatata	taggaatgaa	aagattgaat	tcagctgcat	taaaaagatt	aaattcagct	600
g						601

<210> 92
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 92						
tatctttatc	tcagtgtagg	gaagaattta	ttttaaaaag	aagacacaaa	aggccatata	60
taggaatgaa	aagattgaat	tcagctgcat	taaaaagatt	aaattcagct	gcgttaaaat	120
caagagcatc	tgtacttgga	cagcatagag	tggaaagaca	aagagaaggt	atttgccagc	180
ttataacttg	aaggattaga	atgaatgata	taaagaacta	tgtaaataag	aaaaagacat	240
acaaccggtt	agaaaaacgg	gcaaagacat	gaacagcata	tttcacgtga	aggaaacagc	300
rgtagcaaat	gaacatggta	agagatgctc	aacacgttta	gtaatttgaa	gggaaatgca	360
agttataccc	acagcaagac	tatcttatct	aggaagtttg	tcaataccct	aatgttctg	420
tggtttttaag	ctacagagtt	tgtaattcat	ttatttatct	aataaatact	cagtggcagg	480
cactgtttta	gaaaccttgg	ttataacttt	gaatgaaatt	aaaaaaaaatc	cttgccctgt	540
ggaggatgct	tatgtgtggg	gagttgggtg	gtgggggtcaa	acaacaatta	cattaaaaata	600
g						601

<210> 93
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 93						
acttgaagga	ttagaatgaa	tgatataaag	aactatgtaa	ataagaaaaa	gacatacaac	60
cggttagaaa	aacgggcaaa	gacatgaaca	gcataattca	cgtgaaggaa	acagcggtag	120
caaatgaaca	tggtgaagaga	tgctcaacac	gttttagtaat	ttgaagggaa	atgcaagtta	180

```

taccacacagc aagactatct tatctaggaa gtttgtcaat accctaaatg ttctgtggtt 240
ttaagctaca gagtttgtaa ttcatttatt tattcaataa atactcagtg gcaggcactg 300
ktttagaaac cttgggtata actttgaatg aaattaaaaa aaatccttgc cttgtggagg 360
atgcttatgt gtggggagtt ggggtggtggg gtcaaacaac aattacatta aaatagaaaa 420
tagtgacata aataaaccta taaatattgc aaccagagt tatattataa atgtaagtag 480
tgactaggac tctcatgcag atatacctct gtgctgggac aaatgaaagt ttaagtgtaa 540
tttcccatat gcaagtcaaa ataaaaagtg acactagaaa acacaataat gaatatctga 600
a                                                                 601

```

```

<210> 94
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 94
ggcatttaag tattctgcca tagggaagtg taaaagttgt aggcttttac tttttatagg 60
tactatatgg tccaaataat ctcagcacct catgggtgct aaggatctgt gtccttggtt 120
ggtcagatta tgtttatctc tggcataagg cacttaacaa tattcattaa aggttacaga 180
atctttttgc ttcattctgt tagcatttca taccagtttg ttttccacca aactttcaaa 240
ttttgattgt ttcattaata ttctgcatac tgatgtaaac caagttctat tattgtgcaa 300
wctgctcctg aaacccttag gaactctctg aaggagtttt atttattttt tgtttttgtt 360
tttgtttttg ttttgttttt ttgagacgga gtcttgctct gttgcccagg ctagagtgca 420
gtggtgcgat ctcggtctct tgcaaaactcg gcctccgggg ttcacgccat tctcctgcct 480
cagccaccgg agtagctggg actacaggca cccaccactg cgcttggtta attttttttg 540
tatttttagt agagacgggg tttcaccgtg ttagccagga tgggtctgat ctctgacct 600
t                                                                 601

```

```

<210> 95
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> variation
<222> (301)...(301)
<223> T, C, or neither (single base deletion) may be
      present

```

```

<400> 95
ttgagacgga gtcttgctct gttgcccagg ctagagtgca gtggtgcgat ctcggtctct 60
tgcaaaactcg gcctccgggg ttcacgccat tctcctgcct cagccaccgg agtagctggg 120
actacaggca cccaccactg cgcttggtta attttttttg tatttttagt agagacgggg 180
tttcaccgtg ttagccagga tgggtctgat ctctgacct tgtaatccgc ccgcctcgcc 240
tcccaaagtg ctgggattac aggcgtgagc cactgtgccc ggcctttttt tttttttttt 300
ytttatgggc ttgtcttcta cacttcagat ttgactaaat taaatatgca ttaaatgaag 360
tcaggagttc acattgccac tagtaacaat gcctaagctt acataaagca ttataaaatt 420
gttggtgatt agtgcttctt cagctatgag tataagataa tattatacta gtagttcagt 480
tgcttagata aattgtacac tatgtgaagt tttatttaca taattcttac ggtatttttt 540
aaggtagttg ataacagttg agactacaat tgtatctcca ttttattgat agtaaaatga 600
a                                                                 601

```

```

<210> 96
<211> 601
<212> DNA
<213> Homo sapiens

```

<400> 96
gaattgtaaa aatattatta tagaattggt tctctcaaac tataagtaatg tagaatagggt 60
tgaaggggtg atgatttgaa acaataacctc tccattagct aaattttata tagaatctat 120
tgcattgttt aaatgataag tcagatttat aaaaatatatt ttataaacag taggaaatga 180
gttttaggggt attcacatac agttttaatt tttatttaca tatttaaaac atatcatggt 240
ataaatatga tgtggatata aatttgagat aaaggaagta ttgtttaaga attgatgaac 300
kaatttctta aaagatgtca tcaccagttg gttttctagc cttatgaaaa atgggtgcaa 360
taaaaaagat tgactatgat aaaatgctgc cctttcattt taacctagac caagagaaaa 420
cactactgtga atctatgatg aatgaaagaa agttgtaact gttgggtttg tatatttgta 480
attactgttt attttcattt cttgtgaact gatactgtac tttgttcatt gtgagtagac 540
aacttataat ctatgtactc aaattgggtt agtataaatt ctagggaatg aagttcatat 600
t 601

<210> 97
<211> 452
<212> DNA
<213> Homo sapiens

<400> 97
tggtatactt atgggtcaaca ctttttatat ttgtctgtag atttctgtac aaaaagattc 60
tgacactgtt ttaagccagc attccttcag aatgtaccca aatctcaaaa tttatttagg 120
ggcaagcta atgcttttaa gaaaaaggag argggattgg tgtgtgtttt tctttaggaa 180
cagtagtaac ttgactttta gagaacttga ataagcattt attttttcct ttgtcctatt 240
ttattgtgaa gtttatttat ttaaaataaa atggatttct ctggaattta gtttctgcaa 300
atgtgaggag tttccaaagt caaccttcag gtttgatact tctctagaaa gactcacata 360
actcactgaa agcttattac ccctgggttat ggtttattac ggggaaaaga tgcggatgaa 420
aatcagtcaa gtaaagaagc acatagggca ga 452

<210> 98
<211> 601
<212> DNA
<213> Homo sapiens

<400> 98
ttatatcatt ctgcttttat ttttaggttc acgggtcaaa atcagacaaa atgaacatat 60
ttggtggctt tcgacagatg gtaaaagaag gaggtatccg ctgcgtttgg aggggaaatg 120
gtacaaacgt catcaaaatt gctcctgaga cagctgttaa attctgggca tatgaacagg 180
taattgttat caccctgaga atttatatac aaagaggagt tagtaaacgg attcaataaa 240
tgtaaatgta taatgctttt gggattcctt ttttaataca tgataatctt tcacatatac 300
yccataagga ggatcactta taggagatta gactaaataa aatcagagat ttctcatgac 360
caagttatgg gattcttaat tcatcatatt atttataaag tttttttttt ctaagtagtt 420
cttaaaggaa gggtagaatt ttagtttatt cattctgaat cctgagcaga agcagcacac 480
taacataagt tttatgaaag tgtcacaatc taacctctgg aaggaaaact ataagttgaa 540
gtcctttgtg taatttgacg ttgctgtaaa attgagctga gtttgagtg acacctccat 600
g 601

<210> 99
<211> 601
<212> DNA
<213> Homo sapiens

<400> 99
aaattgctcc tgagacagct gttaaattct gggcatatga acaggtaatt gttatcacc 60
gtggaattta ttaacaaaga ggagtttagt aacggattca ataaatgtta atgtataatg 120
cttttgggat tcttgtttta atacatgata atctttcaca tatacccat aaggaggatc 180
acttatagga gattagacta aataaaatca gagatttctc atgaccaagt tatgggattc 240

ttaattcatc	atattattta	taaagttttt	tttttctaag	tagttcttaa	aggaagggta	300
kaatttttagt	ttattcattc	tgaatcctga	gcagaagcag	cacactaaca	taagttttat	360
gaaagtgtca	caatctaacc	tctggaagga	aaactataag	ttgaagtcct	ttgtgtaatt	420
tgacgttgct	gtaaaattga	gctgagtttg	gagtgcaccc	tccatgaagg	caggggcgtg	480
gcttcttccc	catgtactcc	agcacctaga	cagagcttgg	catgtgataa	gtttcaagcg	540
agtgttgaat	gagtcaatga	atgaacaaat	gcatttacct	ctgaatcact	tctctgtcgg	600
c						601

<210> 100
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 100						
tgggattcct	gttttaatac	atgataatct	ttcacatata	ccccataagg	aggatcactt	60
ataggagatt	agactaaata	aaatcagaga	tttctcatga	ccaagttatg	ggattcttaa	120
ttcatcatat	tatttataaa	gttttttttt	tctaagtagt	tcttaaagga	agggtagaat	180
tttagtttat	tcattctgaa	tcctgagcag	aagcagcaca	ctaacataag	ttttatgaaa	240
gtgtcacaa	ctaacctctg	gaaggaaaac	tataagttga	agtcctttgt	gtaatttgac	300
rttgctgtaa	aattgagctg	agtttgaggt	gacacctcca	tgaaggcagg	ggcgtggcct	360
cttccccatg	tactccagca	cctagacaga	gcttggcatg	tgataagttt	caagcgagtg	420
ttgaatgagt	caatgaatga	acaaatgcat	ttacctctga	atcacttctc	tgctcggctt	480
tgttaaacttg	gattatttga	gctattgctt	cagcctaact	caatgtaaag	gggaaataca	540
gaggtaagtt	ttagagtttg	ggttctcttt	atggtcatta	gcagaactgt	ctagttgagc	600
a						601

<210> 101
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 101						
catatacccc	ataaggagga	tcacttatag	gagattagac	taaataaaat	cagagatttc	60
tcattgaccaa	gttatgggat	tcttaattca	tcataattat	tataaaagttt	tttttttcta	120
agtagttcct	aaagggaagg	tagaatttta	gtttattcat	tctgaatcct	gagcagaagc	180
agcacactaa	cataagtttt	atgaaagtgt	cacaatctaa	cctctggaag	gaaaactata	240
agttgaagtc	ctttgtgtaa	tttgacgttg	ctgtaaaatt	gagctgagtt	tggagtgaca	300
sctccatgaa	ggcaggggcg	tggtctcttc	cccatgtact	ccagcaccta	gacagagctt	360
ggcatgtgat	aagtttcaag	cgagtgttga	atgagtcaat	gaatgaacaa	atgcatttac	420
ctctgaatca	cttctctgtc	ggcttttggt	aacttggtt	atgttgagcta	ttgcttcagc	480
ctaactcaat	gtaaagggga	aatacagagg	taagttttag	agtttggtt	ctctttatgg	540
tcattagcag	aactgtctag	ttgagcagcc	acagattatg	ttttccatta	tttattccat	600
c						601

<210> 102
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 102						
ataaggagga	tcacttatag	gagattagac	taaataaaat	cagagatttc	tcattgaccaa	60
gttatgggat	tcttaattca	tcataattat	tataaaagttt	tttttttcta	agtagttcct	120
aaagggaagg	tagaatttta	gtttattcat	tctgaatcct	gagcagaagc	agcacactaa	180
cataagtttt	atgaaagtgt	cacaatctaa	cctctggaag	gaaaactata	agttgaagtc	240
ctttgtgtaa	tttgacgttg	ctgtaaaatt	gagctgagtt	tggagtgaca	cctccatgaa	300
sgcaggggcg	tggtctcttc	cccatgtact	ccagcaccta	gacagagctt	ggcatgtgat	360

```

aagtttcaag cgagtgttga atgagtcaat gaatgaacaa atgcatttac ctctgaatca 420
cttctctgtc ggcttttgtt aacttggatt atttgagcta ttgcttcagc ctaactcaat 480
gtaaagggga aatacagagg taagtttttag agtttgggtt ctctttatgg tcattagcag 540
aactgtctag ttgagcagcc acagattatg tttccatta tttattccat cattgtttat 600
c 601

```

```

<210> 103
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> variation
<222> (301)...(301)
<223> C may be either present or absent

```

```

<400> 103
gcacctagac agagcttggc atgtgataag tttcaagcga gtgttgaatg agtcaatgaa 60
tgaacaaatg catttacctc tgaatcactt ctctgtcggc ttttggttaac ttggattatt 120
tgagctattg cttcagccta actcaatgta aaggggaaat acagaggtaa gtttttagagt 180
ttgggttctc tttatggcca ttagcagaac tgtctagttg agcagccaca gattatgttt 240
tccattattht attccatcat tgtttatcaa ggactgtaag ggccttgaaa ttcaactccc 300
ccccccatag tttttgtatt attccatgta gatttttagat tattctggag agtggtttgt 360
tcttgagcaa cagaatactc ttgagaagat tacgaagtcc agtggatatcc ttttctttgc 420
ctaggaaata gagaagcaaa aaaaaaaaaa aaaaaaaatt aaagaaaatc tagtctccag 480
gattttaatt agaacctatc cttgggaagg ctattttcct tatatgaagg tttgaagatt 540
caaatcatga ttattaaggg ctaatgtttg agataccctt aggttattct gaccacatac 600
t 601

```

```

<210> 104
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 104
catttacctc tgaatcactt ctctgtcggc ttttggttaac ttggattatt tgagctattg 60
cttcagccta actcaatgta aaggggaaat acagaggtaa gtttttagagt ttgggttctc 120
tttatggcca ttagcagaac tgtctagttg agcagccaca gattatgttt tccattattht 180
attccatcat tgtttatcaa ggactgtaag ggccttgaaa ttcaactccc ccccccatag 240
tttttgtatt attccatgta gatttttagat tattctggag agtggtttgt tcttgagcaa 300
sagaatactc ttgagaagat tacgaagtcc agtggatatcc ttttctttgc ctaggaaata 360
gagaagcaaa aaaaaaaaaa aaaaaaaatt aaagaaaatc tagtctccag gattttaatt 420
agaacctatc cttgggaagg ctattttcct tatatgaagg tttgaagatt caaatcatga 480
ttattaaggg ctaatgtttg agataccctt aggttattct gaccacatac ttggatttta 540
tgataggaaa gccacagcct aaaataaata aatactcaat gcagttattt cagtatgcaa 600
g 601

```

```

<210> 105
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 105
gattattctg gagagtgttt tgttcttgag caacagaata ctcttgagaa gattacgaag 60
tccagtggta tctttttctt tgcctaggaa atagagaagc aaaaaaaaaa aaaaaaaaaa 120
attaaagaaa atctagtctc caggatttta attagaacct atccttggaagg aggtattttt 180

```

ccttatatga	aggtttgaag	attcaaataca	tgattatttaa	gggctaattgt	ttgagataacc	240
cttaggttat	tctgaccaca	tacttggatt	ttatgatagg	aaagccacag	cctaaaaataa	300
rtaaatactc	aatgcagtta	tttcagtatg	caagaagttt	ggatatttttg	aaaaagtcca	360
tgggtattgc	aagcaaatac	gcacattttg	ctttatgcca	tttgtcagat	tcttaccttg	420
gataccacca	acaggcatcc	tctgcttctg	tccacccaag	ctccttcctg	agacctcttt	480
atagtattgt	gatttctgca	cactaacttt	cttagacatg	aagagaaagc	tgtctacaca	540
gtgtggtgta	gttttcttat	gggctctgga	cctatggtgc	tgttttctct	cctcctgctg	600
a						601

<210> 106
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 106						
tgaccacata	cttggatttt	atgataggaa	agccacagcc	taaaataaat	aaatactcaa	60
tgcagttatt	tcagtatgca	agaagtttgg	tatttttgaa	aaagtccatg	ggatttgcaa	120
gcaaataatgc	acattttgct	ttatgccatt	tgtcagattc	ttaccttgga	taccaccaac	180
aggcatcctc	tgttctgtgc	cacccaagct	ccttcctgag	acctctttat	agtattgtga	240
tttctgcaca	ctaactttct	tagacatgaa	gagaaagctg	tctacacagt	gtggtgtagt	300
kttcttatgg	gctctggacc	tatggtgctg	ttttctctcc	tcctgctgaa	gggccattca	360
tcctcggggg	ctctctaaaa	gccaccttcc	tgtgacaagc	atatactaag	catctcaatc	420
aaagccagtt	cctccctgt	ccagcctccc	tcgagtgtg	aattgcagaa	tatcccattt	480
ttcattggat	gatggaaaac	ccattgtttt	cccagtggat	tgtaaattac	ttcggggtaa	540
ataggctgta	tatattctca	aatttcccag	agtatgtaac	taggtcactt	ttagattcag	600
a						601

<210> 107
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 107						
tccatgggta	ttgcaagcaa	atatgcacat	tttgctttat	gccatttgtc	agattcttac	60
cttggatacc	accaacaggc	atcctctgct	tctgtccacc	caagctcctt	cctgagacct	120
ctttatagta	ttgtgatttc	tgcacactaa	ctttcttaga	catgaagaga	aagctgtcta	180
cacagtgtgg	tgtagttttc	ttatgggctc	tggacctatg	gtgctgtttt	ctctcctcct	240
gctgaaggtc	cattcatccc	tcggggctct	ctaaaagcca	ccttcctgtg	acaagcatat	300
mctaagcatc	tcaatcaaag	ccagttcctc	ccctgtccag	cctccctcga	gtgctgaatt	360
gcagaatatc	ccatttttca	ttggatgatg	gaaaaccat	tgttttccca	gtggattgta	420
aattacttcg	gggtaaatag	gctgtatata	ttctcaaatt	tcccagagta	tgtaactagg	480
tcacttttag	attcagatag	attttgttcc	ttgaatagct	agtactttag	gaaactaaga	540
aaaagatctt	ttcaacctgg	tatgtagctc	tgtcaaacac	atcatcagta	tggggtaaac	600
c						601

<210> 108
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 108						
ctcggggctc	tctaaaagcc	accttcctgt	gacaagcata	tactaagcat	ctcaatcaaa	60
gccagttcct	cccctgtcca	gcctccctcg	agtgtgtaat	tgcagaatat	ccattttttc	120
attggatgat	ggaaaaccca	ttgttttccc	agtggattgt	aaattacttc	ggggtaaata	180
ggctgtatat	attctcaaat	ttcccagagt	atgtaactag	gtcactttta	gattcagata	240
gattttgttc	cttgaatagc	tagtacttta	ggaaaactaag	aaaaagatct	tttcaacctg	300

rtatgtagct	ctgtcaaaca	catcatcagt	atggggtaaa	cctgtgttct	ctgtgggttg	360
tcattaccat	agtagtgtca	ttgtatcatt	gacagtgtaa	tagtgtgggg	tagtgttctt	420
gtgggtttcag	ctgccactct	gtactgactg	ctttccactc	ca		462

<210> 109
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 109						
atcttttcaa	cctgggtatgt	agctctgtca	aacacatcat	cagtatgggg	taaacctgtg	60
ttctctgtgg	gttgtcatta	ccatagtagt	gtcattgtat	cattgacagt	gtartagtagt	120
ggggtagtgt	tcttgtgggt	tcagctgcc	ctctgtactg	actgctttcc	actccaacat	180
cttctctctt	atctcaacac	tgtagggtcta	cctgtgtact	gtgtgtttca	gcatctctgc	240
ttgcatgacc	caggagtgcc	tcccactcaa	tatggccacc	atgcatgggc	atctttctgc	300
tactccctgt	ctcctgacct	tgctccagca	acacagacag	acacccttcc	tctttctata	360
tgtcatatgg	tggggaatgc	ccttttagtac	ttactcagga	gtagttcct	ctgg	414

<210> 110
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 110						
cattaccata	gtagtgtcat	tgtatcattg	acagtgtaat	agtgtgggg	agtgttcttg	60
tgggtttcagc	tgccactctg	tactgactgc	tttccactcc	aacatcttcc	tctttatctc	120
aacactgtag	gtctacctgt	gtactgtgtg	tttcagcatc	tctgcttgca	tgaccagga	180
gtgcctccca	ctcaatatgg	ccaccatgca	tgggtcatctt	tctgctactc	cctgtctcct	240
gacctgtctc	cagcaacaca	gacagacacc	cttctctttt	ctatatgtca	tatgggtgggg	300
ratgcccttt	agtacttact	caggagttag	ttcctctggg	aagccttctg	ttctagtttc	360
cttttgttac	agcactttca	cattgaattc	tgacgttctc	tgtacttata	tgctttgtga	420
gactgtgagc	ttccttaggc	agtagctact	tgtattctta	gcaccttgcc	cagtggcagg	480
aaacccttat	taagtaaagt	aaaagacaga	actgacagac	tgggaattaga	gctcaagctt	540
gcctcaatct	caagccatta	agatgaagg	gagccggg	tgggtggctca	cgctctaat	600
c						601

<210> 111
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 111						
atagtagtgt	cattgtatca	ttgacagtgt	aatagtgtgg	ggtagtggtc	ttgtgggttc	60
agctgccact	ctgtactgac	tgctttccac	tccaacatct	tcctctttat	ctcaacactg	120
taggtctacc	tgtgtactgt	gtgtttcagc	atctctgctt	gcatgaccca	ggagtgcctc	180
ccactcaata	tggccaccat	gcatgggtcat	ctttctgcta	ctccctgtct	cctgacctgt	240
ctccagcaac	acagacagac	acccttctct	tttctatatg	tcatatgggtg	gggaatgccc	300
bttagtactt	actcaggagt	tagttcctct	gggaagcctt	ctgttctagt	ttccttttgt	360
tacagcactt	tcacattgaa	ttctgacgtt	ctctgtactt	atctgctttg	tgagactgtg	420
agcttcctta	ggcagtagct	acttgatttc	ttagcacctt	gcccagtgcc	aggaaacctt	480
tattaagtaa	atgaaaagac	agaactgaca	gactggaatt	agagctcaag	cttgccctcaa	540
tctcaagcca	ttaagatgaa	ggggagccgg	gcgtggtggc	tcacgcctct	aatcccagca	600
c						601

<210> 112
 <211> 601

<212> DNA
<213> Homo sapiens

<400> 112

```
ccagcctggg caacgtggca aaacccatt tctacaaaa atataaaaat tagttggacg 60
tgggggtgtg tgctgtact caggatgctg aggtgggagg atcacttgag ctcgagaggc 120
agaggttgca gtgagctggg atcacacccat tgcaatctag cctgggtgat agaagagac 180
cttgtctcaa aaaaaaata aataaataaa taaaggggaa gataaggatt ggaaacagaa 240
ggagcagcat gtggacagaa atgtaggcac aagaaggcat cactcactga agagactgaa 300
rgtggttcac tgtgcctcaa gactggtgga gtgtgtttcc ggaaagataa tgatgaaaga 360
gctggacaga taacagggg ccaaagttaa taggagtctg gattttattc tgaatatggg 420
aggggctatt gtagcatctt atatagggaa gtgaaatgag tacattcaca ttaaggaat 480
atcaacctga aaaaagagtg gagacattgt tgggggagag tgaggtagac tagaggcagg 540
gagaatattt aaataattga ggtaagaaat gatgaacacc agtataaggg gatgtcttta 600
a 601
```

<210> 113
<211> 601
<212> DNA
<213> Homo sapiens

<400> 113

```
tagactagag gcagggagaa tatttaaata attgaggtaa gaaatgatga acaccagtat 60
aaggtgatgt ctttaaggaa tggagaaggg aatgaactga gaaatatttt ggaagtagaa 120
tcaacagaac tcaactgact actggatatg gaggtgagaa agagaagagt caagaatgat 180
attctaattt ctaacttgag tgactgcatt caaagagaat acaatatcag gttccatttt 240
gtgcatgctg agtttgagat gtgtgggaca tgtacaggga gctgtccagt aagcaattgg 300
rtatatcagc tagccattaa gagagagatc tttgatagag aggttggtgc tgagttgagc 360
cattggaatg ggcaggatca ctcaagaaga gcttataaat gagaagaatt ctaggaataa 420
gtccaaaggg agaagtaaaa gaagaaactt gcaaaggaca ctgagaagaa atagctcgag 480
ggatgggaga aaatccagag agagggatgg cataggagtc agtgggaagga aacgggtttca 540
tgggggtcag tactactggg tagtgaatat aataagaata tcttttagga tttctcaacc 600
c 601
```

<210> 114
<211> 601
<212> DNA
<213> Homo sapiens

<400> 114

```
tcaggggtgt tttgagggct cagttaagtc tccttttagga aggttcagtt ctgtagcctt 60
ggcaagttac ttaaagtctc tgtgactatt acctcatctc taagatgggg actaagcttg 120
gtgacatagt ttacataacc aggcacagtg cctgactttt tggctctgtc ctgaagtctt 180
ccctttgtat atggtatggt tcggggaata ggagcctcaa gcacttatcc tttaaatatt 240
tatactccat cagtcactaa acgtttactc tgtacttttg atagggtgctg tgggggtcca 300
rggtataaaa ggtaccttca aagttactgt taaagtgcag gaagggtttt aagcaaatta 360
tgtttaatga ttttgacaat ctgacatgca ggaaaattaa tagggcctat gcagaagagg 420
agttttatgt aacactctgt agttcaggaa acagagccct tgggaagcag gatctctctg 480
gggaggaatg tctggtatgt gggaatctca tgaaatgata atatacttaa tttttatcat 540
gagcagcaaa acacagattt gctaggagaa agtcatcgta tgttggtgca ttgggcactt 600
t 601
```

<210> 115
<211> 601
<212> DNA
<213> Homo sapiens

```

<400> 115
gaggaacctc catgtcattt tccatagtaa ctagaccttt ttgtttttta acatttctat 60
caatgtacac caagattcca atttctccat gtccctccca acaccattaa gtggggtggt 120
ggtctactac tattgctgtg ttgctgttta ttccctccct cagttctgta agtgtttgct 180
tcatatattt aggagcttaa tattaggtcc atatgaagtt ataatttctt cctggtaaag 240
tgacctcatt atcattatgt aatgtccatc ttgtctctct gtgacagttt gtgtcttaaa 300
rtctattttg tctgatgtaa ttatggccac cccttttctc ttggggttcc cgtttttatg 360
gaatatcttt ttccatcctt tcactttcag cttatgtgtg tccttagatc taaagtgagt 420
ctcatagata aggtatagtt gattctgtat gtgttattca ctcagcaatt tataatctttt 480
agttagggga tttaatccat ttacatttaa agcagttact gataggggaag gacttactgt 540
tgtcatttgg ctagctacct ttttatcttt gtccctgtggc ttttctgttt ttcccttctc 600
c 601

```

```

<210> 116
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 116
catatattta ggagcttaat attaggtcca tatgaagtta taatttcttc ctggtaaagt 60
gacctattta tcattatgta atgtccatct ttgtctcttg tgacagtttg tgtcttaaaa 120
tctattttgt ctgatgtaat tatggccacc ccttttctct ttggggtccc gtttttatgg 180
aatatctttt tccatccttt cactttcagc ttatgtgtgt ccttagatct aaagtgagtc 240
tcatagataa ggtatagttg attctgtatg tgttattcac tcagcaattt atatctttta 300
rttaggggat ttaatccatt tacatttaaa gcagttactg ataggggaagg acttactgtt 360
gtcatttggc tagctacctt tttatctttg tcctgtggct tttctgtttt tcccttctc 420
tcttctctggc ttcttctgtg ttttgttgat tttttttttt tttgtagtga tatgttctga 480
ttcccttctc atttcccttt gtgtgcattc tatagatgct atttttgtgg ttaccattgc 540
aactacataa agcatactaa agttatagca acttatttta agctgtttac aacttaactt 600
c 601

```

```

<210> 117
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 117
gactgaaatt cagacacatg cagtctgatt ctaaccctcc tgtctgccag ctctgatcca 60
gaactttgca tgactgatac ggctgataga ttgtctatgg ctgatagact gtcatttctg 120
acctaaaagt ctgatcattt tacatctgtt cagacatctt tgcagccttt cgggtgcagt 180
tccaaagttg ttagtgaggaa tttcaaagcc ttttaataatc tagccccact ttgttcactc 240
tctgtgtaat aaccacatac aacaattggc tgcactctca tagcacatgg tactcctccc 300
rttgtcttgg ttgtgccagc aacactgggt ttcgctttct ctctctgctt gttgaggtca 360
tttccaaggc ccaggctctt gtgctttttc ccaagcttcc cagagcttct tccatactcc 420
ccttacttcc tgagatttaa ctgttctctc ttcagcgctt gtctagtaag aaggaggcag 480
cagcagcact gtggggtggt ggaaagtgtc ccagcttttg agtcagacca ttggatctca 540
gccctaccat tttctactta gattttttta ggacaaaatt ctccatcttt ctaagcctcc 600
a 601

```

```

<210> 118
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 118

```

tctagcccca	ctttgttcac	tctctgtgta	ataaccacat	acaacaattg	gctgcatctc	60
catagcacat	ggtactcctc	cggttgtctt	ggttgtgcca	gcaacactgg	ttttcgcttt	120
ctcttcctgc	ttgttgaggt	catttccaag	gccaggtct	ttgtgctttt	tcccaagctt	180
cccagagctt	cttcatact	ccccttactt	cctgagattt	aactgttctc	tcttcagcgc	240
ttgtctagta	agaaggaggc	agcagcagca	ctgtgggggtg	gtggaaagtg	taccagcttt	300
rgagtcagac	cattggatct	cagccctacc	atcttctact	tagatttttt	taggacaaat	360
ttctccatct	ttctaagcct	ccaattgctc	acttacaaaa	ttgatataac	atttaccttg	420
caagattggg	atggaaggta	attaacccag	tatttagaac	atagtaatta	ataaataact	480
attattacca	tcattactat	agttaggaca	ctcactgtta	ggtgctatac	aaagaggatc	540
ataaaaggga	tgttgtcttg	ggcttcttgg	aataaatggt	gtccttttac	tgtatttttag	600
a						601

<210> 119
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 119						
ttggatctca	gccctaccat	tttctactta	gatttttttta	ggacaaattt	ctccatcttt	60
ctaagcctcc	aattgctcac	ttacaaaatt	gatataacat	ttaccttgca	agattgggtat	120
ggaaggtaat	taaccagta	tttagaacat	agtaattaat	aaataactat	tattaccatc	180
attactatag	ttaggacact	cactgttagg	tgtatatacaa	agaggatcat	aaaagggatg	240
ttgtcttggg	cttcttggaa	taaatgttgt	ccttttactg	tatttttagaa	tatcattctg	300
rgtcataatt	gtttgttgtc	ataataatga	aacatacttg	aataattaaat	taccctcttt	360
ttttattttt	tagccatggt	agaagggtcc	ccacagctga	atatggttgg	cctctttcga	420
cgaattattt	caaagaagg	aataccagga	ctttacagag	gcatcacccc	aaacttcatg	480
aagggtgctcc	ctgctgtagg	catcagttat	gtgggttatg	aaaatatgaa	gcaaacttta	540
ggagtaaccc	agaaatgatg	ttgcattttt	tgcttttagcc	tgataattga	aactttcaac	600
a						601

<210> 120
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 120						
atgaagcaaa	ctttaggagt	aaccagaaaa	tgatgttgca	ttttttgctt	tagcctgata	60
attgaaactt	tcaacaatct	ctggagtgc	tttttctcct	cgaattgaaa	caagtctatg	120
gcaaaagaag	ctgcattttt	ttcacaaaag	ggaagatggg	aacaatgggc	acttcaaaact	180
tttgggctaa	attatatgta	cacagaaatg	ttcaaaatca	tagttttaat	gtgttttgaa	240
aaggccacac	aattatactt	tatcttttct	taataatcct	gcaaactctc	gccctgaatc	300
ygaaatctga	aaatgtactg	gcttgaacaa	aatttgtttt	gtgtgttaga	gttataaaatc	360
attaatcttt	atttcgggtg	gtttacgttt	atgccagttc	ctttatatatt	aaatttcttg	420
ttttatatat	tttgaatgtc	tttatagatt	tctttaaatt	tccttataga	accattaata	480
gaaaatcatt	acatttataa	tataccttac	agcaaaagca	tccaaataag	tatagggttt	540
atgtccttat	ttttctttca	gctgaatacg	aatgagcaca	gtggtggaat	ttctgaaggg	600
a						601

<210> 121
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 121						
atcctgcaaa	tctctgccct	gaatccgaaa	tctgaaaatg	tactggcttg	aacaaaattt	60
gttttgtgtg	ttagagttat	aaatcattaa	tctttatttc	gggtggttta	cgtttatgcc	120

```

agttccttta tatttaaatt tcttggttta tatattttga atgtccttat agatttccttt 180
aaatttcctt atagaaccat taatagaaaa tcattacatt taaaatatac cttacagcaa 240
aagcatccaa ataagtatag ggtttatgtc cttatttttc tttcagctga atacgaatga 300
rcacagtggg ggaatttctg aagggaagtg atgaaattat atttatttca gtgggcactt 360
ttccatttta ccactgtacc attatttggg tcttgagggt atacactaat tttcagtata 420
ttactgttaa attaccaaca caaggcaatt tatttgaaag attccgttta tcttgccatt 480
gctttgaaaa gcagcaggaa acgaaatcct ttgacttgta tcagcttctg cagagcatct 540
ttgttttcct ttgtcctttg tttcctacct tttgaatcag attccgtttt agtcaggaag 600
a                                                                 601

```

```

<210> 122
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 122
cactgtacca ttatttggtt cctggagtta tacactaatt ttcagtatat tactgttaaa 60
ttaccaaacac aaggcaattt atttgaaaga ttccgtttat cctgccattg ctttgaaaaag 120
cagcaggaaa cgaaatcctt tgacttggtat cagcttctgc agagcatcct tgttttcctt 180
tgtcctttgt ttcctacctt ttgaatcaga ttccgtttta gtcaggaaga cttcttgggg 240
ccattcttag taacctgaaa tttctttttt aattgcatga agtggattga tcatgagcaa 300
rtgatgtgct tatttctccc tcaactgttg atactcttga acttgctgtt ttcaatatgg 360
gcagcacaaa ggtgagagat acatattaat agtagtatgt attactctta tacattagat 420
acctatattt aaatgaaagg cccaatttgt aaacatatac attcatattc tctcttgccc 480
caagtttttag gaacatgtta ggatatagga gacttaattt ataataatga gagcattttt 540
ttattttact aaagccattt ttatagtcaa ctatcttttc ttatttgtgt gattagaact 600
t                                                                 601

```

```

<210> 123
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 123
atagtagtat gtattactct tatacattag atacctatat ttaaatgaaa ggcccaattt 60
gtaaacatat acattcatat tctctcttgc cccaagtttt aggaacatgt taggatatag 120
gagacttaat ttataataat gagagcattt ttttatttta cttaaagccat ttttatagtc 180
aactatcttt tcttatttgg gtgattagaa cttagaaaaa tatttactag ttgaagttaa 240
tatcagtttt taatttagtt cttaaaactca tttcacttct aataatttct gttataaaatt 300
kccagcattt taatgaaaat ctaatgatgt aataggcatt ttctttattt gaacctacct 360
cttttatttt ctgaaccaa gagaaagatg gactgggtgt tgtgaaacat ttttaaaaaa 420
gtagtttcat ttatatttag tatgtttgat aaatgtctca gtatttttat aatatgataa 480
gcctgggatt ctacttttag ggttatttgg acttttgagt aatatataaa gtgacaatat 540
taagggtacat gatcagctct ttctattttt actcgtaaaa attatggaat tgaataattt 600
t                                                                 601

```

```

<210> 124
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 124
atttctgtta taaattgccg gcattttaat gaaaatctaa tgatgtaata ggcatttttct 60
ttatttgaac ctacctcttt tattttctga accaaaagaga aagatggact ggtgtttgtg 120
aaacattttt aaaaatgtag tttcatttat attagttatg tttgataaat gtctcagtat 180
ttttataata tgataagcct gggattctac ttttaggggt atttgtactt ttgagtaata 240

```

tataaagtga	caatattaag	gtacatgatc	agctctttct	atTTTTtactc	gtaaaaatta	300
yggaaatgaa	taatttttgc	aacaactttg	aaattttcaaa	cttctggaaa	atatgaaaat	360
attcattgtt	cattatgaat	ttaaattgta	aggatgaat	gtgatttgtc	tgtacatctt	420
gtatcttttc	caaaaaatga	ttctgtatct	tttggaaaaa	agccgagagt	tgaagatagt	480
atatttctgg	tagtactgaa	tatttactta	cagtttctat	caaaaatata	tatttgtttc	540
taaaattact	tgttttccag	tttttatttt	ttttagagaa	aattcttaag	tctcagtttc	600
c						601

<210> 125

<211> 601

<212> DNA

<213> Homo sapiens

<400> 125

ttcagaaata	acttatcagt	tatttctgta	agcttcttgc	ttacctggat	acctgacagg	60
tgagatggct	gtagcagaca	ctggcagttc	cctgcccaca	cacctgtccc	tgtccacagc	120
tgcacaaggc	agctctgtgt	gcaattgcc	gcatctgctc	ctctgttctc	agggaaatctt	180
tgtagaaaa	atgctgccat	atttgtttct	cacctattag	tcttgtctcc	cagtcaagag	240
aataaattta	tgcaagcaga	gattgtactt	tacagtattt	tgtctttgag	cttggcatta	300
kgttgcattt	gtaaaaatgt	ggcatggctt	cctcatcccc	caataggaac	tttgccagcc	360
cttttgttct	catggaactt	ccttttttga	aaagagcacc	aaaggagtaa	aaatactgtg	420
gaggagca	ccctcctttg	ccatatgctc	tcattgggag	acatgtggag	cagtctgaag	480
tcatttaggc	cactctctgg	gagagcacat	cctatgatgt	tctcccagcc	tagcccccttc	540
cactgtgctc	aagtccaagc	tgaccagctt	tctgaccaca	gtgtaaacia	agatgattgt	600
c						601

<210> 126

<211> 494

<212> DNA

<213> Homo sapiens

<400> 126

ctgtgtgcaa	ttgccagcat	ctgctcctct	gttctcaggg	aatctttgtt	agaaaaatgc	60
tgccataattt	gtttctcacc	tattagtctt	gtctcccagt	caagagaata	aatttatgca	120
agcagagatt	gtactttaca	gtattttgtc	tttgagcttg	gcattagggt	gcatttgtaa	180
aaatgtggca	tggcttcctc	atcccccaat	aggaaactttg	ccagcccttt	tgttctcatg	240
gaacttcctt	ttttgaaaag	agcaccaaaag	gagtaaaaaat	actgtggagg	gagcaaccct	300
yctttgccat	atgctctcat	tgggagacat	gtggagcagt	ctgaagtcac	ttaggccact	360
ctctgggaga	gcacatccta	tgatgttctc	ccagcctagc	cccttcact	gtgctcaagt	420
ccaagctgac	cagctttctg	accacagtgt	aaacaaaagat	gattgtcagt	gggccccaga	480
atcctatacc	caga					494